

FIG. 1

10

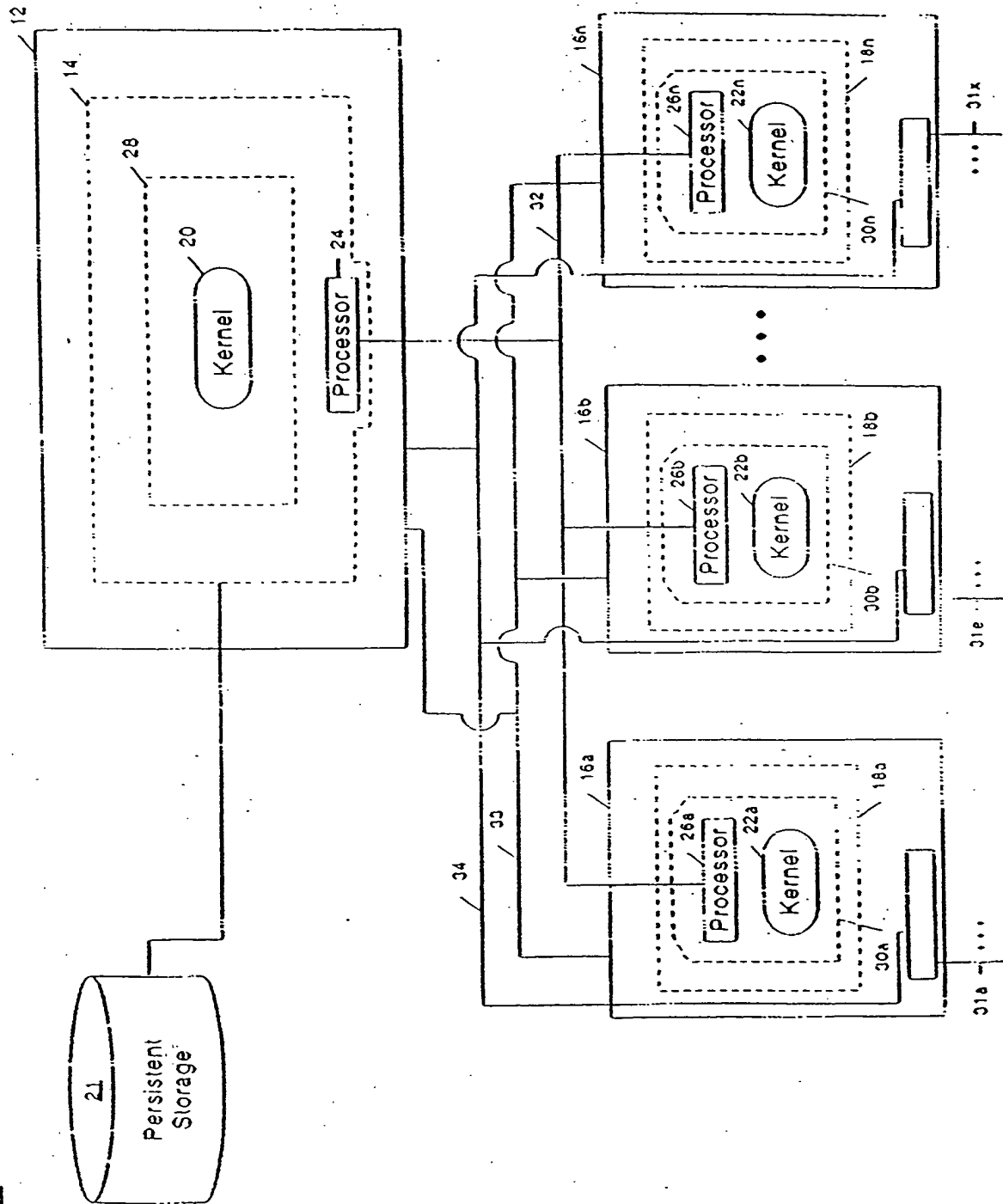


Fig. 2a

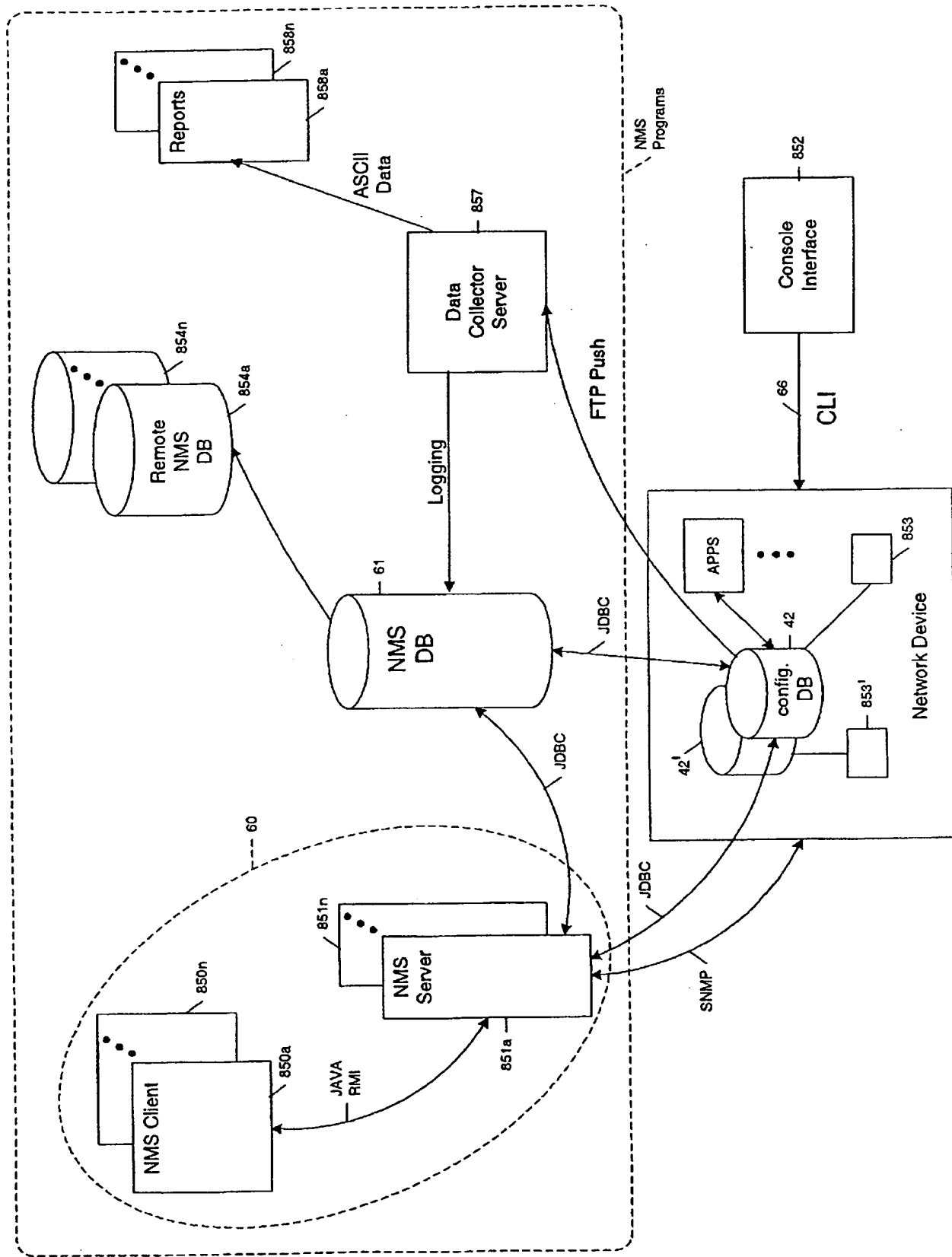


Fig. 2b

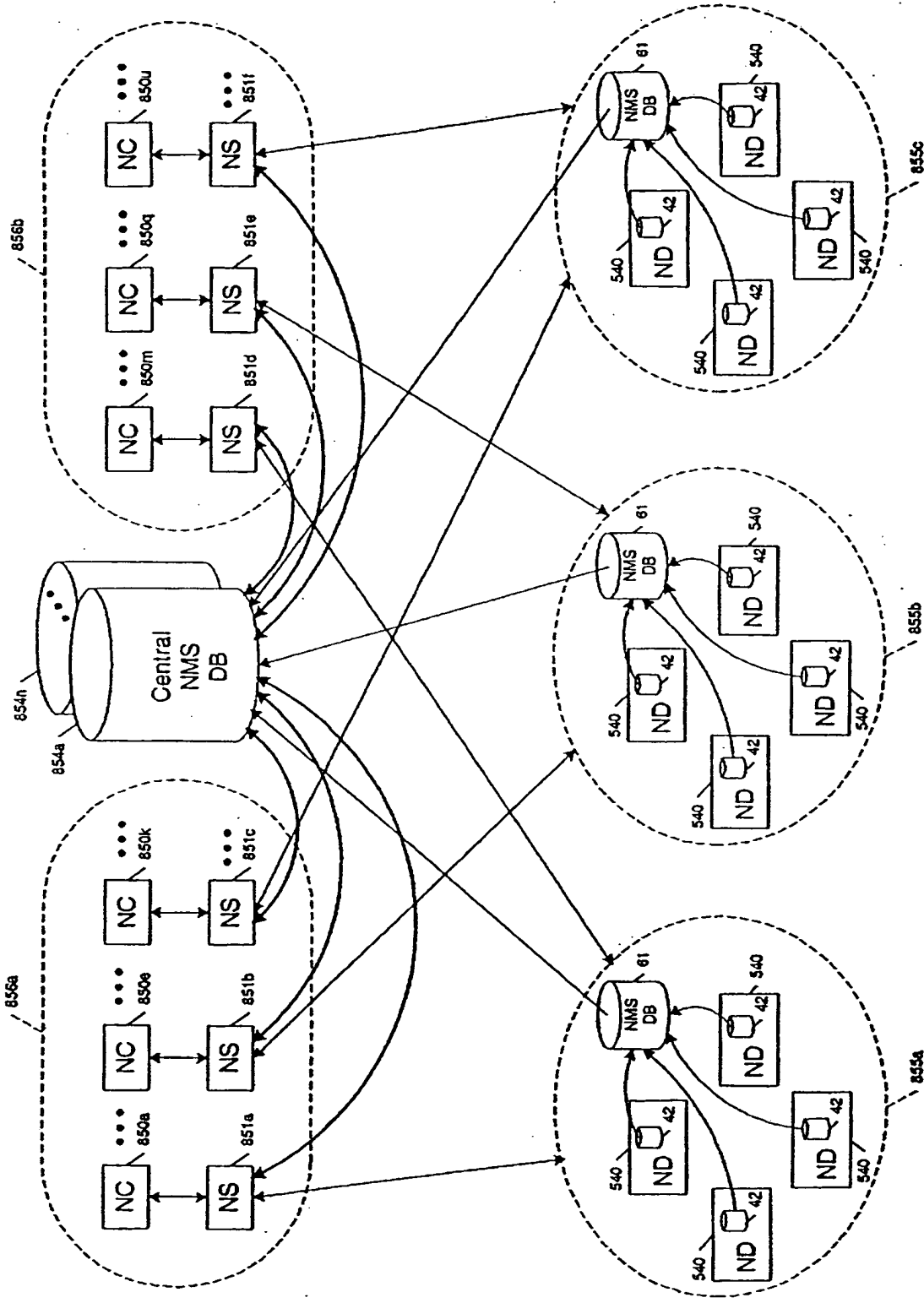
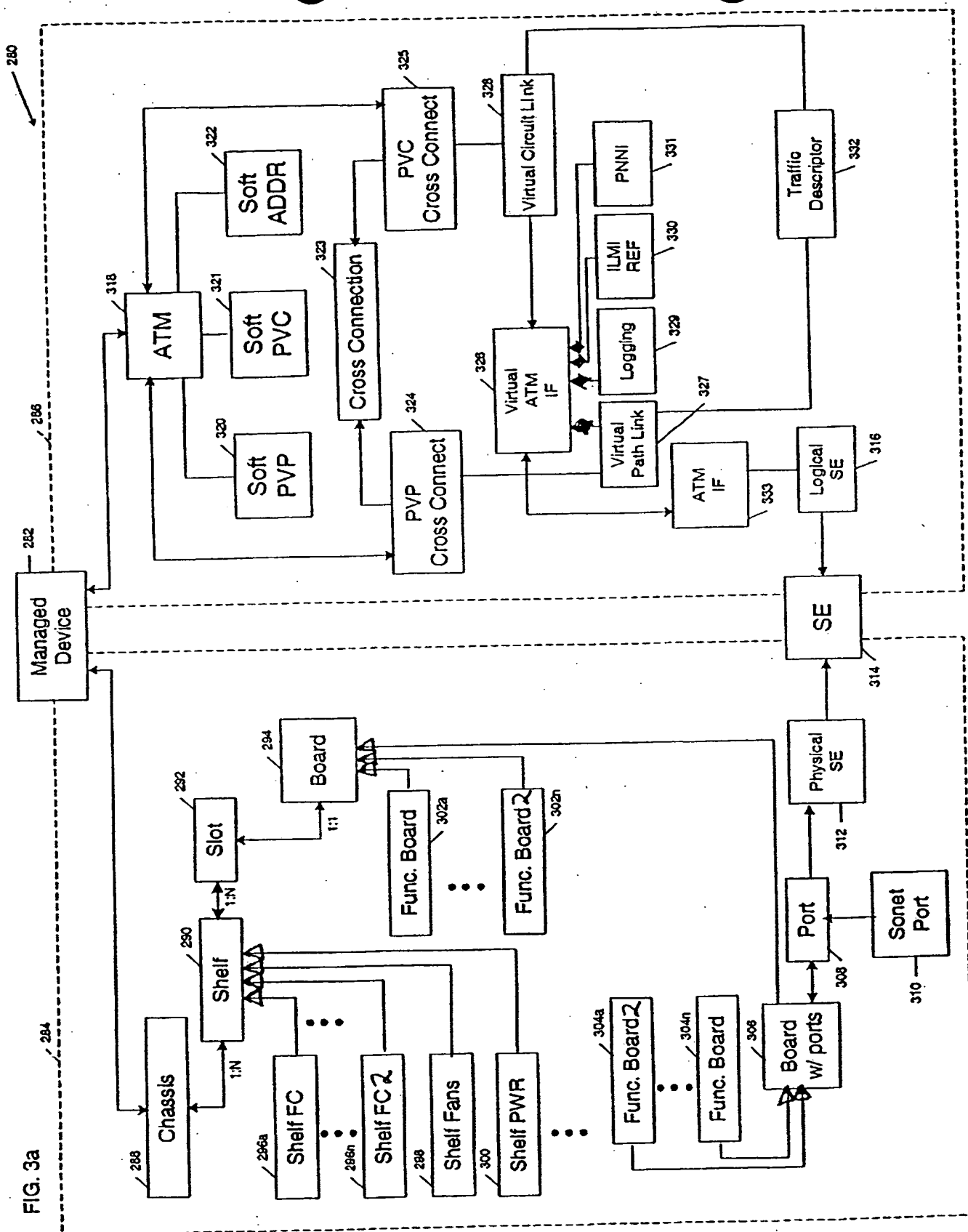
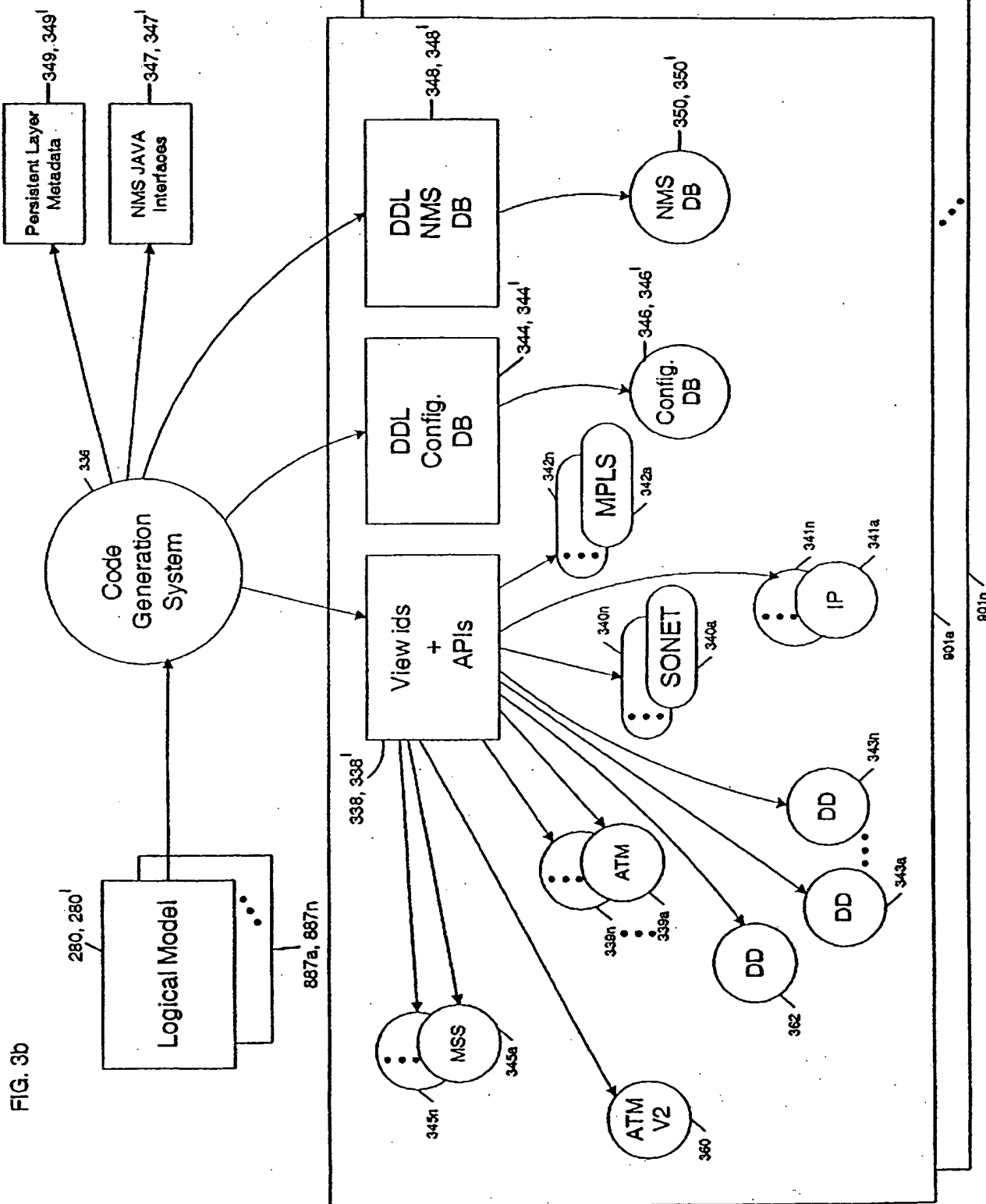


FIG. 3a







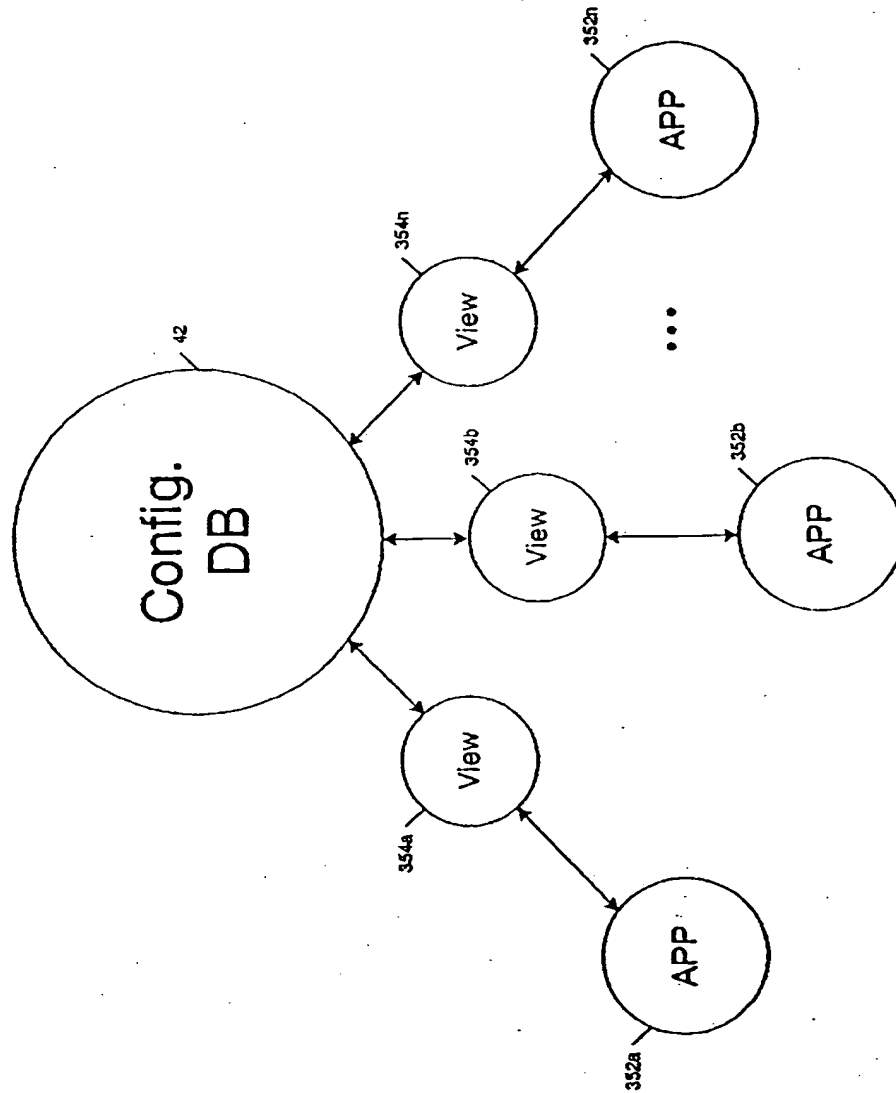
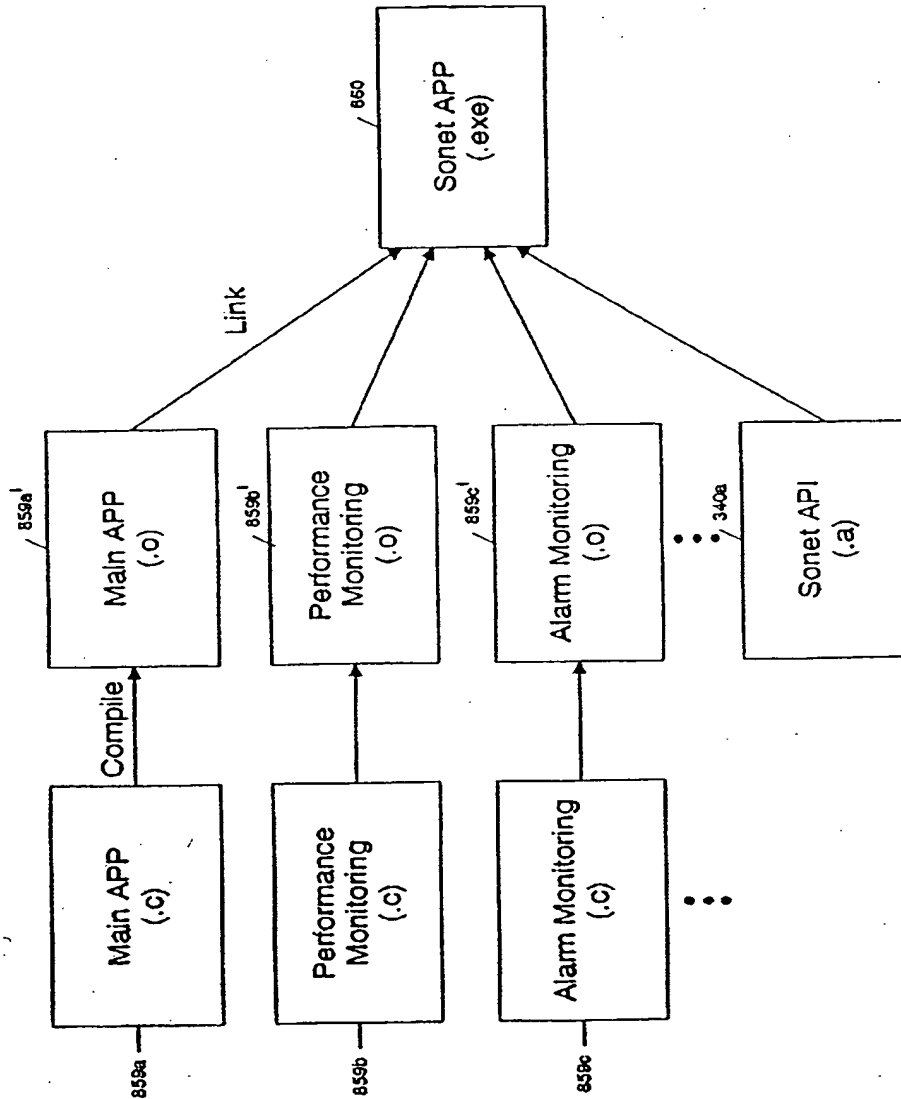


FIG. 3c

Fig. 3d

Build SONET Application



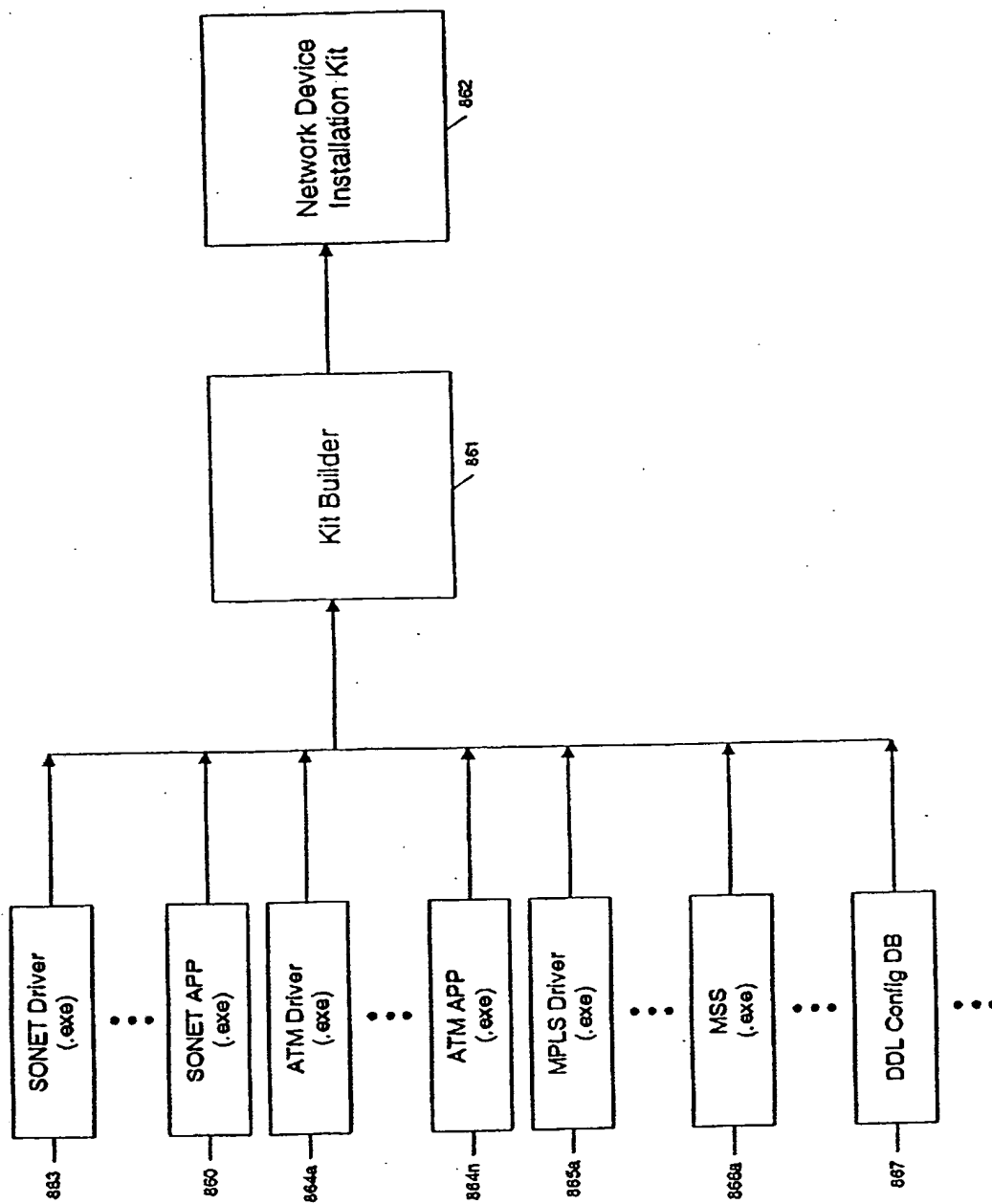


Fig. 3e

Fig. 3R

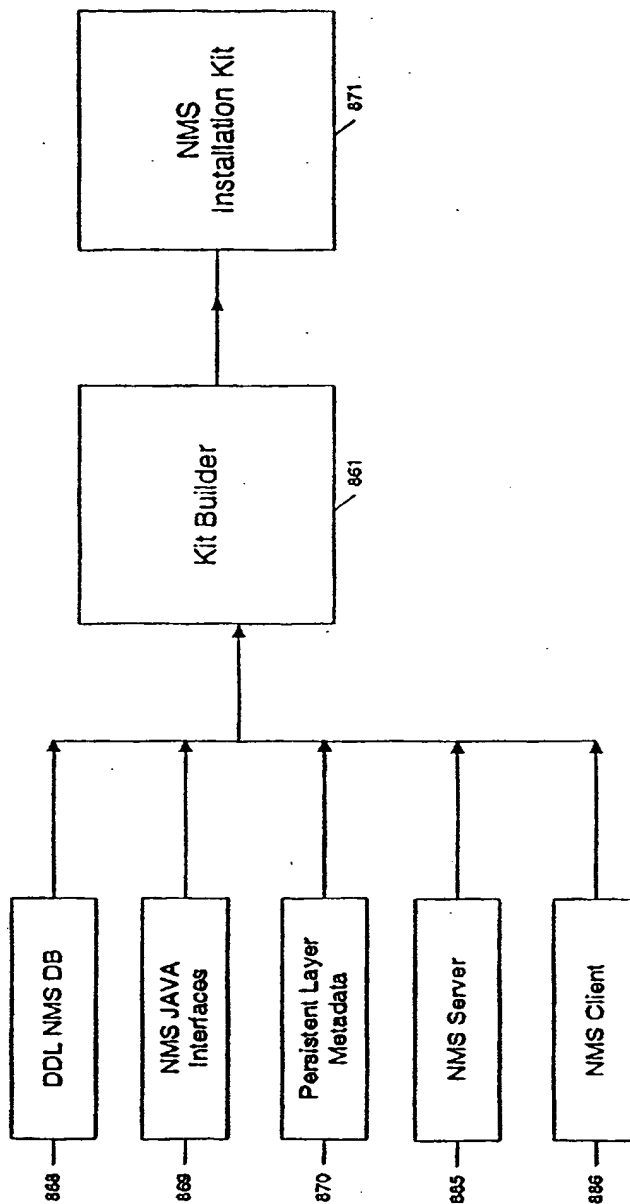


Fig. 3g

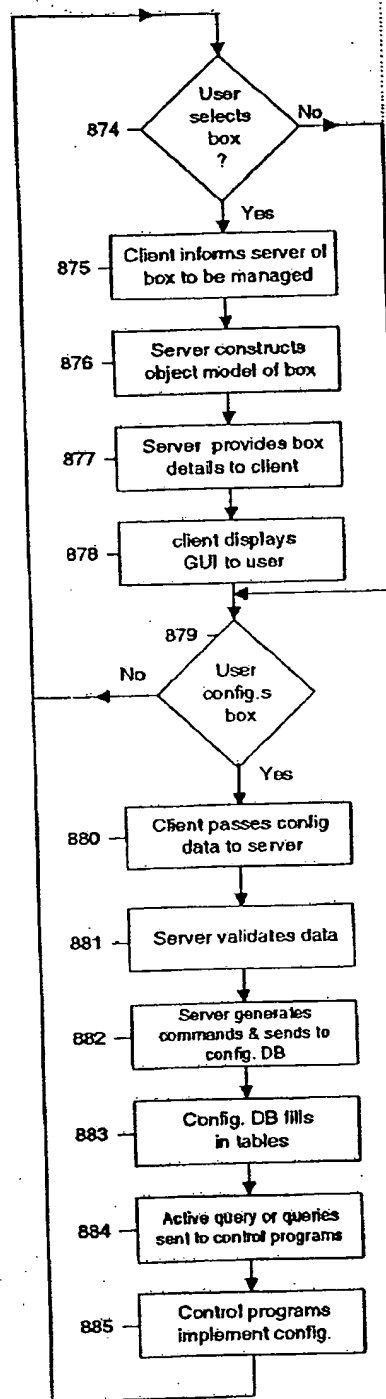
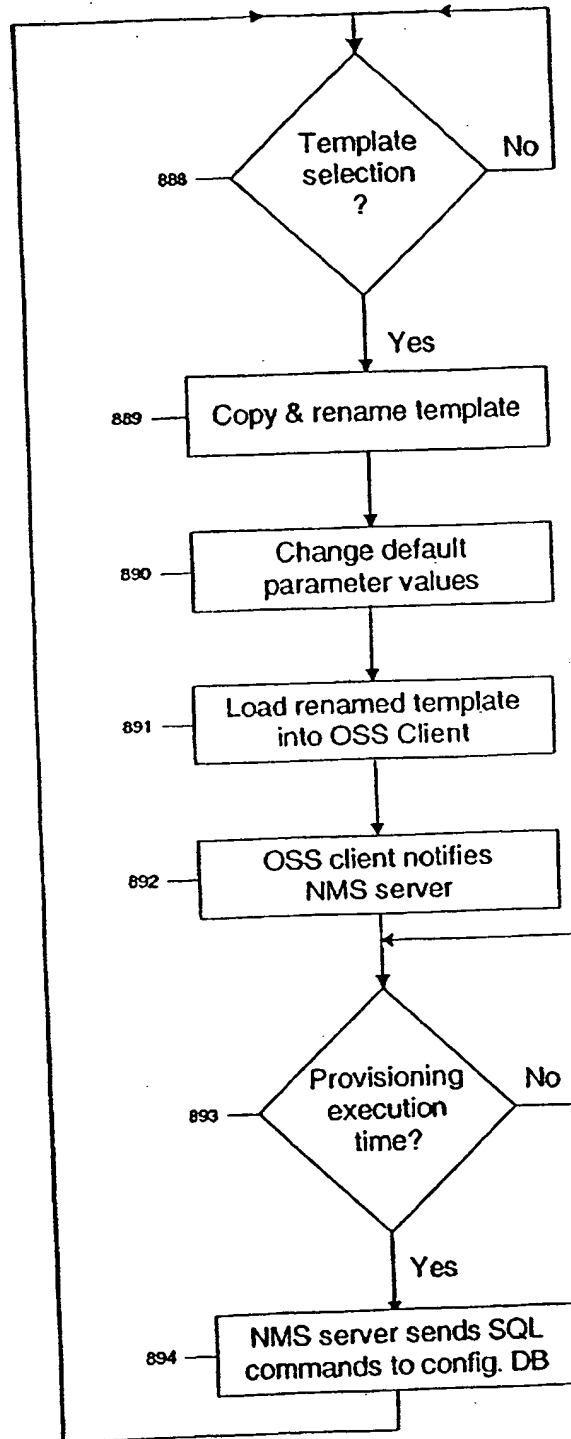


Fig. 3h

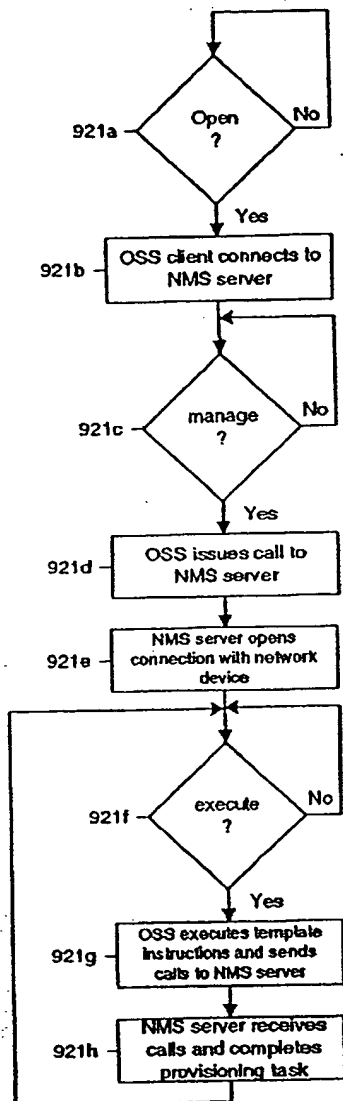


```
Enetcli> status
Not currently connected to server
Supporting templates: CONTROL, PUC, SPATH, SPUC, ID, and UAIF
Enetcli>
```

Fig. 3i



Fig. 3j



1 g. 3K

```

922 Enetcli>
Enetcli> showCurrent CONTROL
Input=0:\nns\con\equipecon\nns\utils\enetcli
Interactive=false
Operant=CONTROL
923d Operator=Manage
923f Output=0:\nns\con\equipecon\nns\utils\enetcli
923c Password=None
923e System=192.168.9.202
923b User=None
923b Version=01_1_0_0
923g Server=localhost
923a Enetcli>

```

1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general overview of the field, followed by a more detailed discussion of the specific issues at hand. The author then presents his own findings, which are based on a series of experiments. These findings are then compared with the results of previous studies, and the author discusses the implications of his work. Finally, the paper concludes with a summary of the main points and some suggestions for future research.

Fig. 3L

← 924 BATCH

Operant=BATCH

Operator=Execute

Version=V1\_1\_0\_0

924a ~ Task1=execute-SPATH

9246 —Task2=execute-PVC

924c—Task3=execute-SPVC

924d-Task4=load-SPVC-spvc1

924e-Task5=execute-SPVC

9248 ---Task6=load-SPVC-spvc2

924c-Task7=exccute-SPVC

924g - Task50=sct-SPATH-PortID-3

924h —Task51=execute-SPATH

924i—Task52=set-SPATH-SlotID-2

924; -Task53=execute-SPATH

[illegible]

Fig. 3M

← 925

Operant=BATCH

Operator=Execute

- Version=VI\_1\_0\_0

925a - Task1=execute-CONTROL

925b - Task2=execute-SPATH

925c - Task3=set-SPATH-PortID-3

925d - Task4=execute-SPATH

925e - Task61=set-CONTROL-System-192.168.9.201

925f - Task62=execute-CONTROL

925g - Task63=execute-SPATH

925h - Task108=close

925i - Task109=set-CONTROL-Server-Server1

925j - Task110=set-CONTROL-System-192.168.8.200

925k - Task111=execute-CONTROL

925l - Task112=execute-SPATH

925m - Task113=execute-CONTROL

895

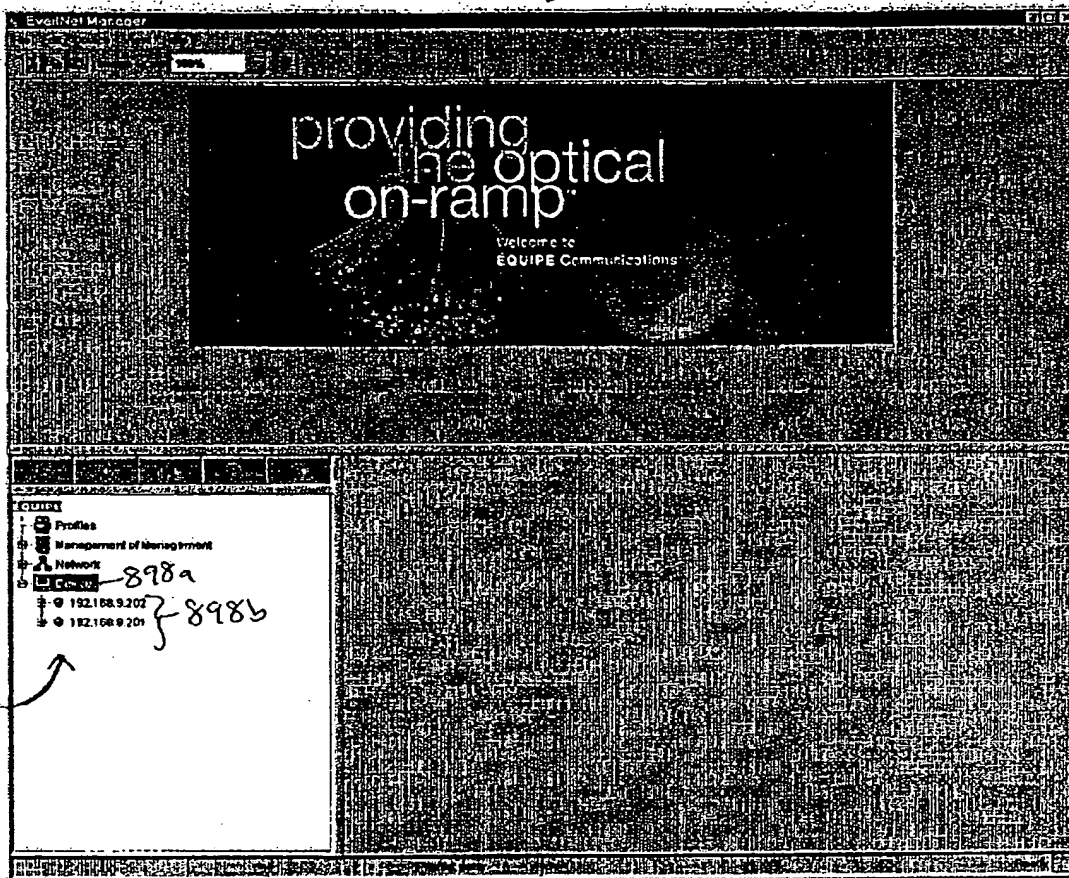


Fig. 4a

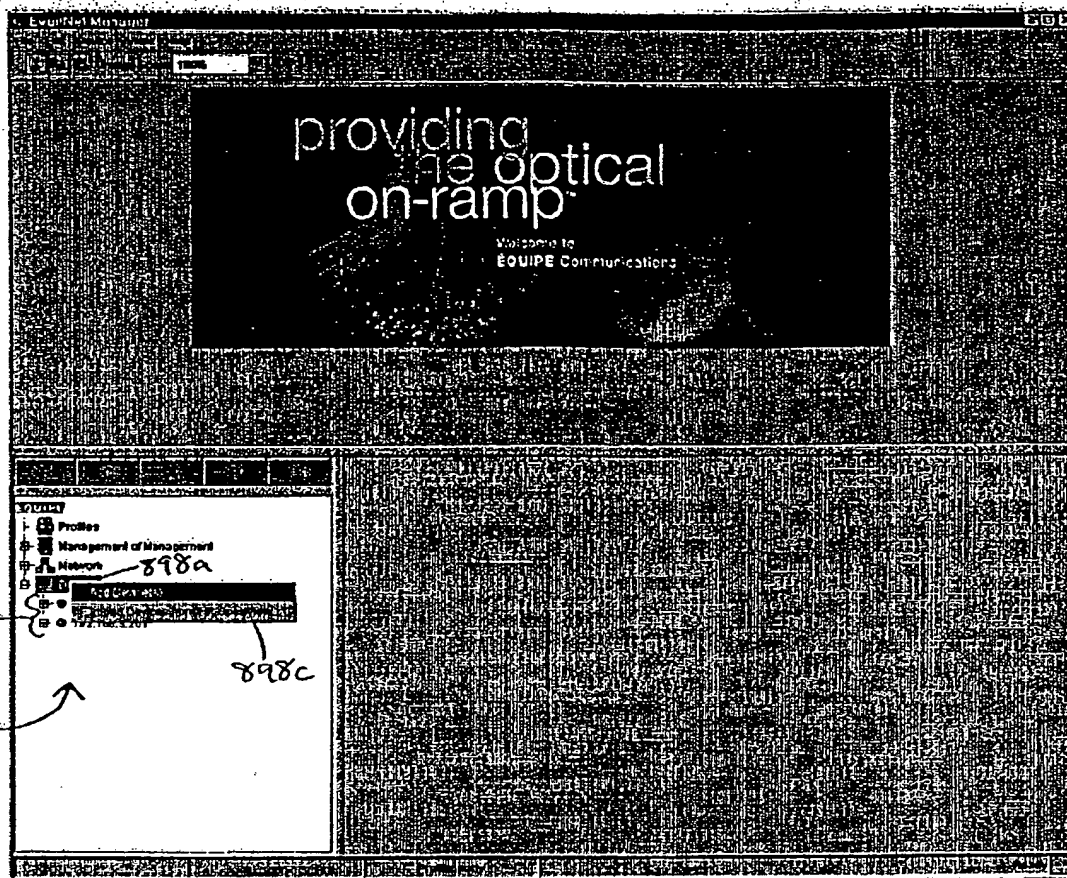


Fig. 4b

[illegible]

Fig. 4c

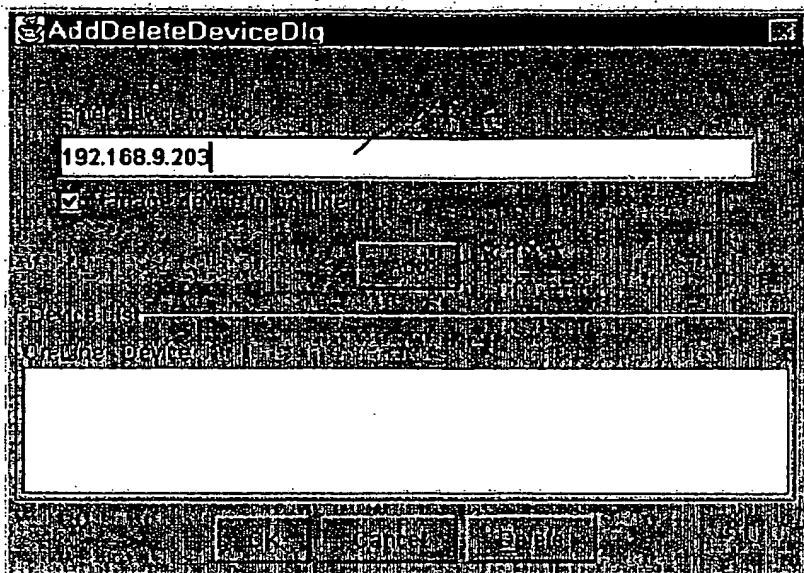
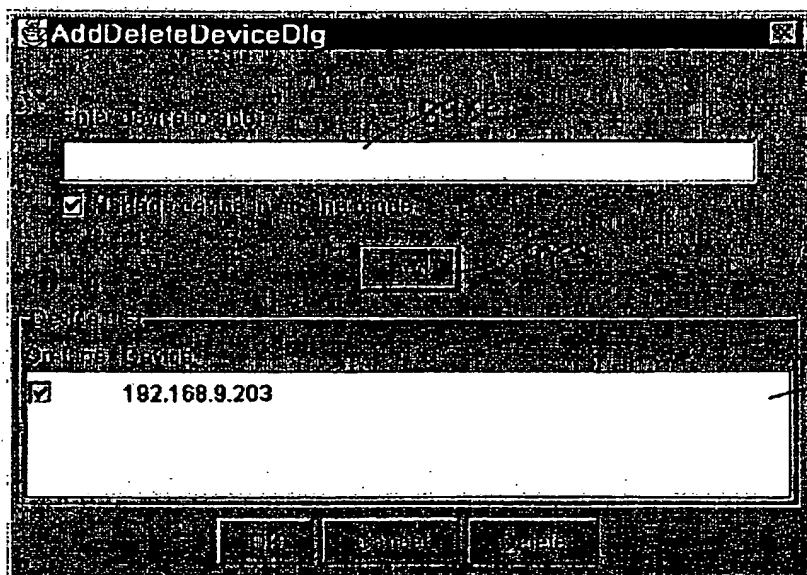


Fig. 4d



895

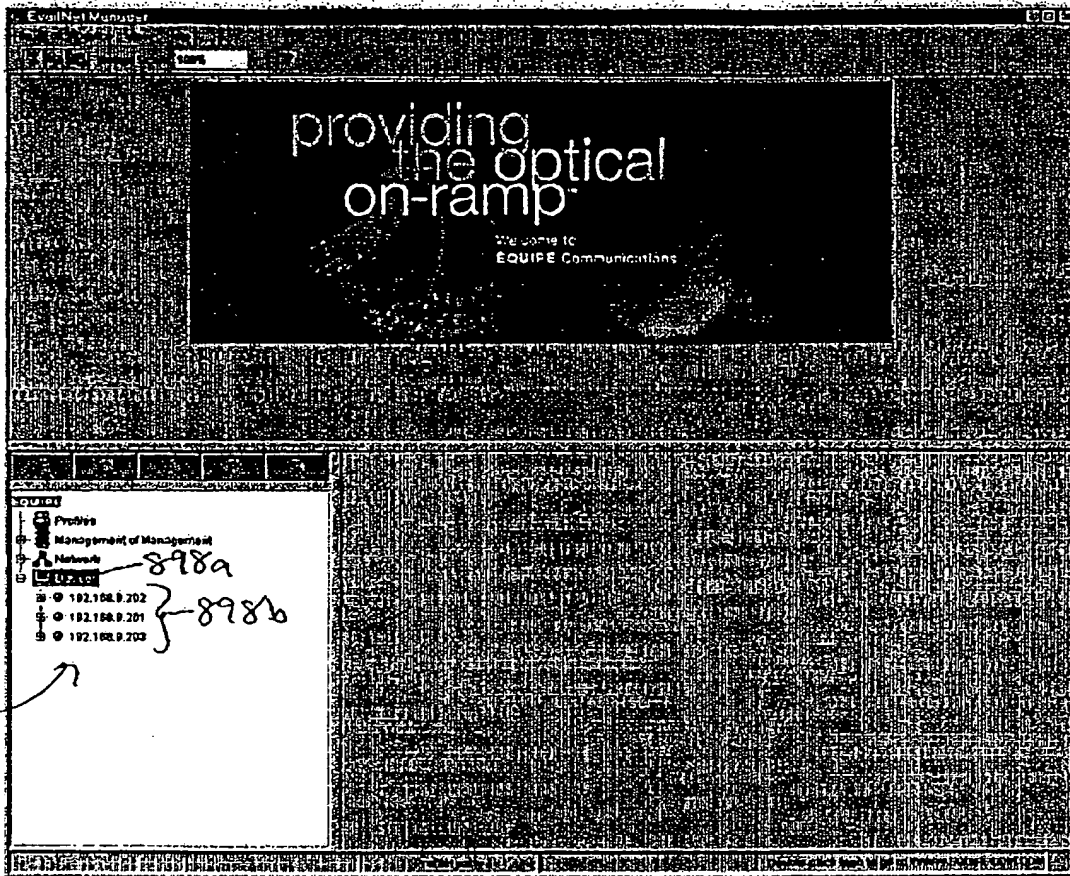


Fig. 4e



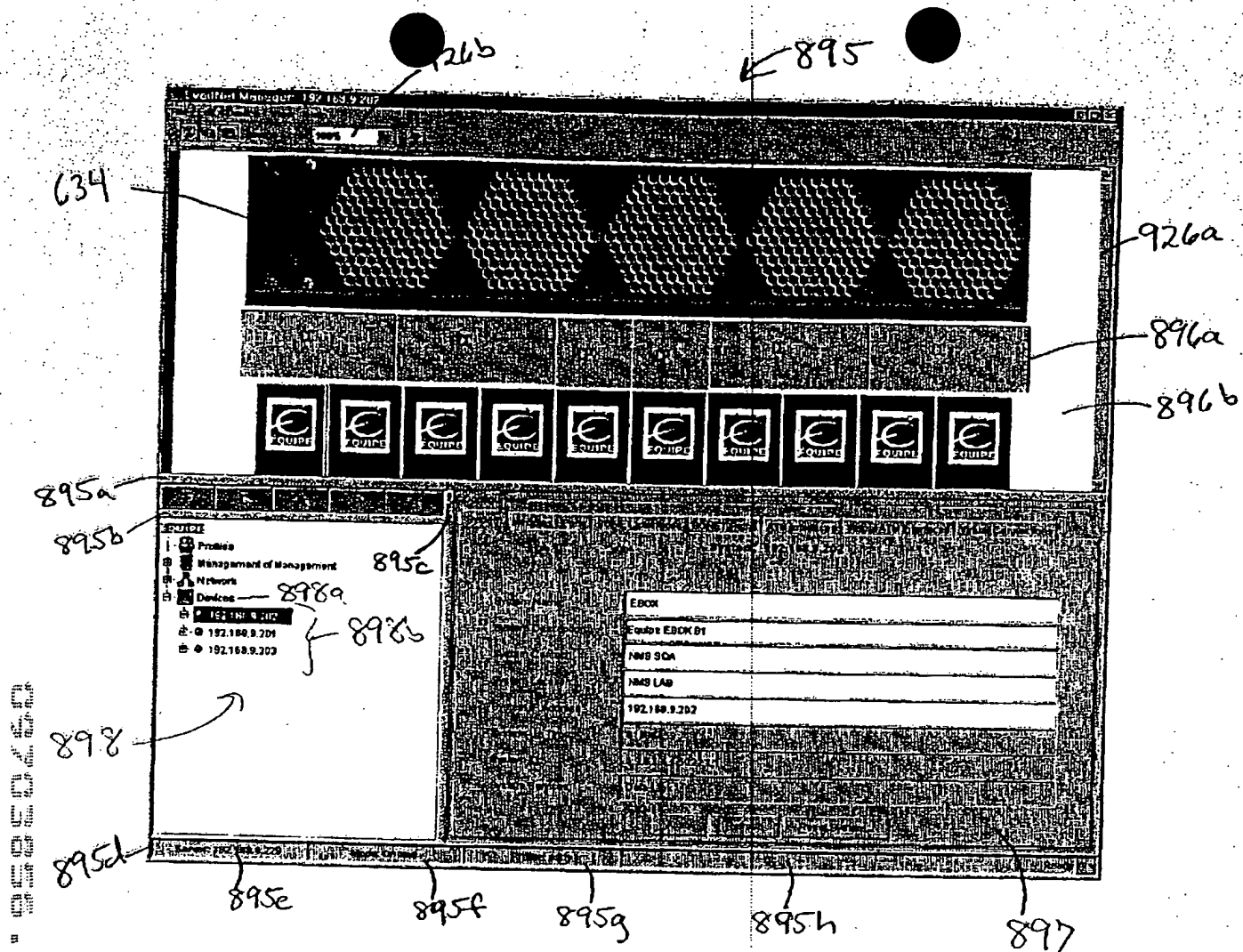


Fig. 4f

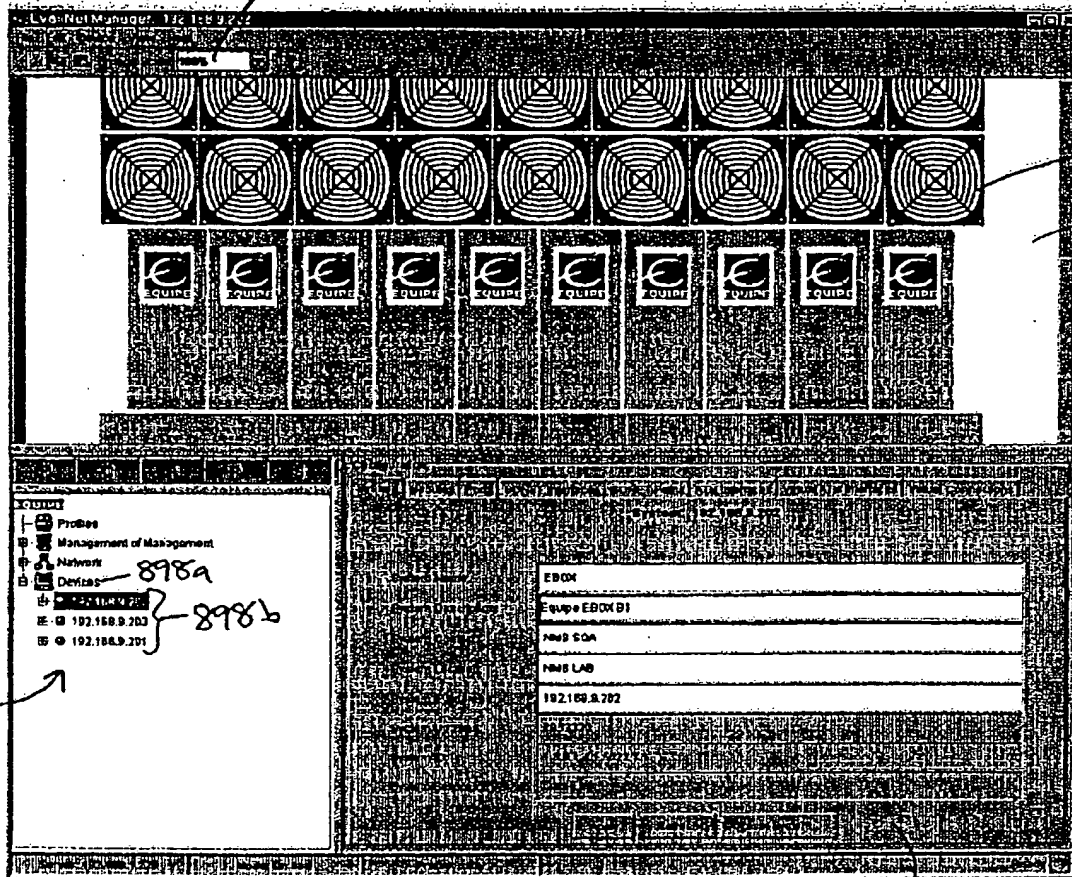


Fig. 4g

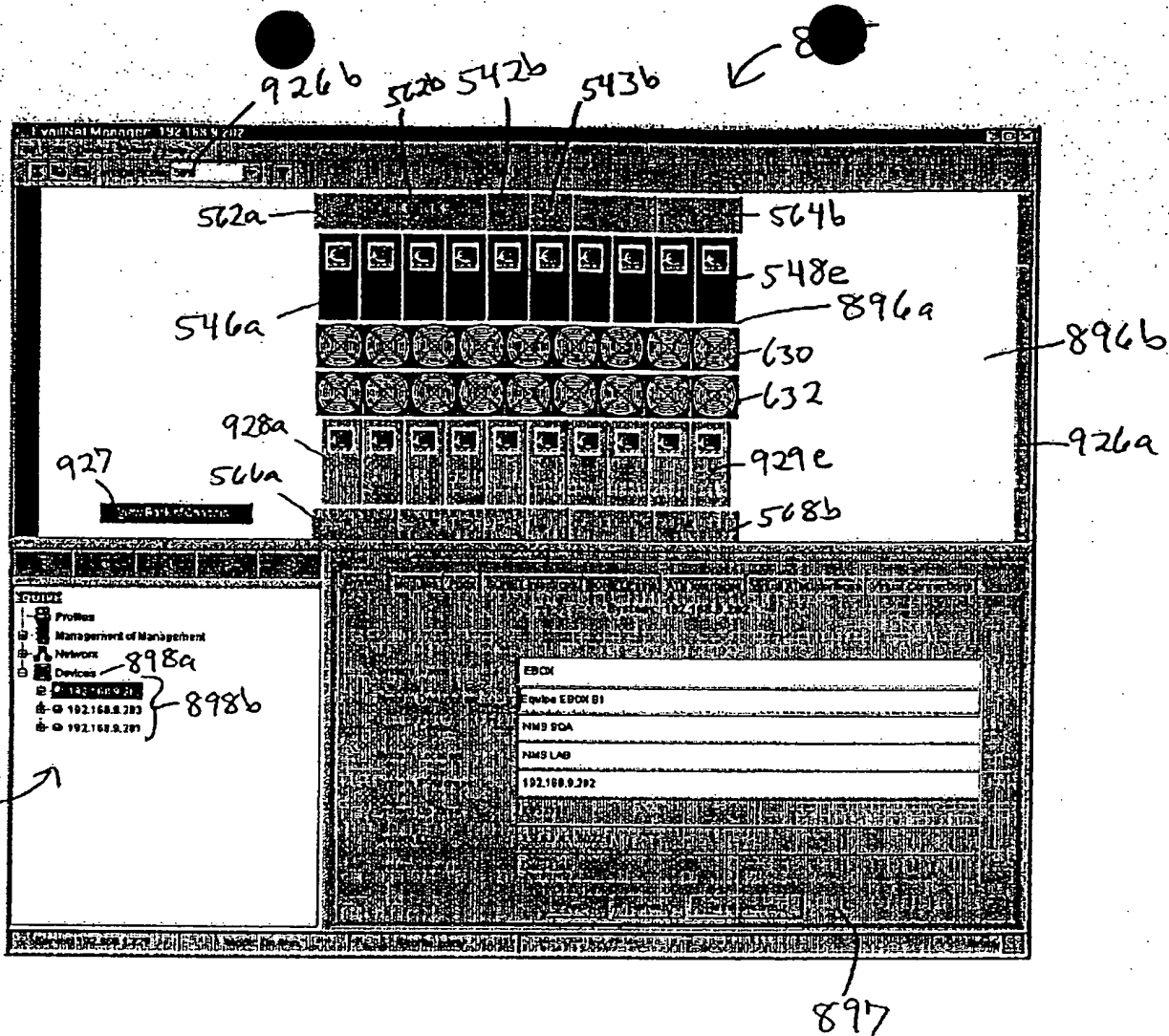


Fig. 4h

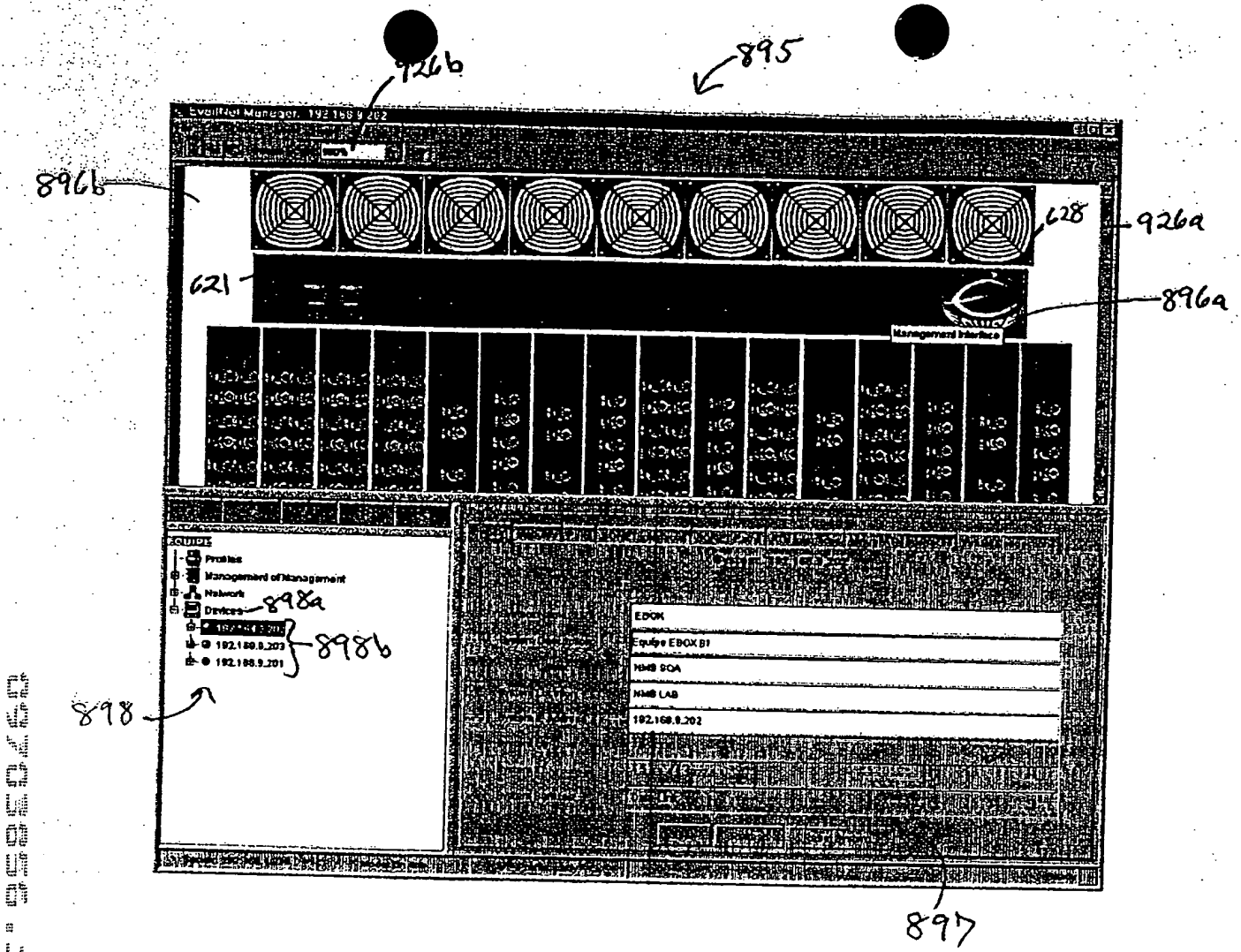


Fig. 4i

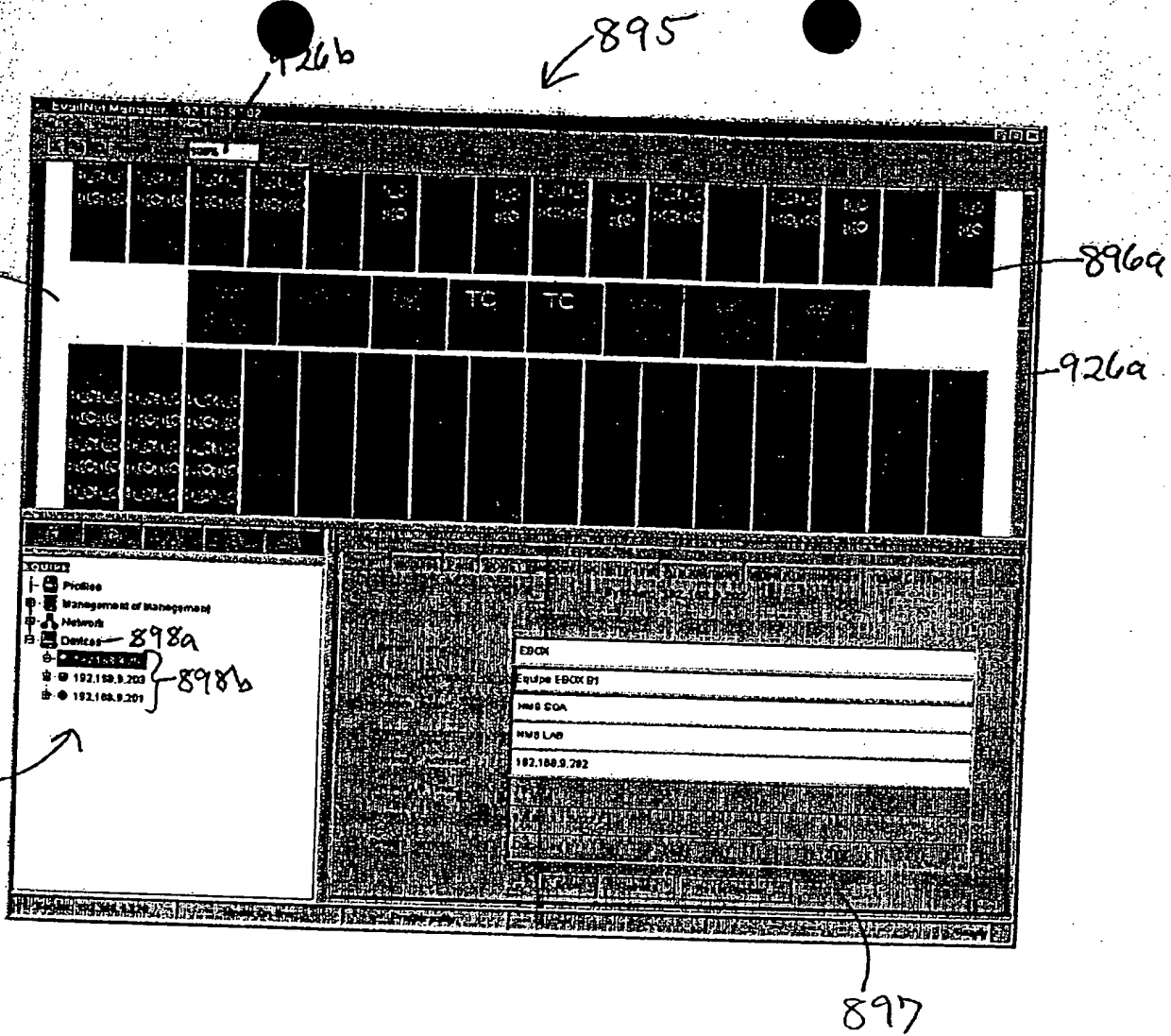


Fig. 4j

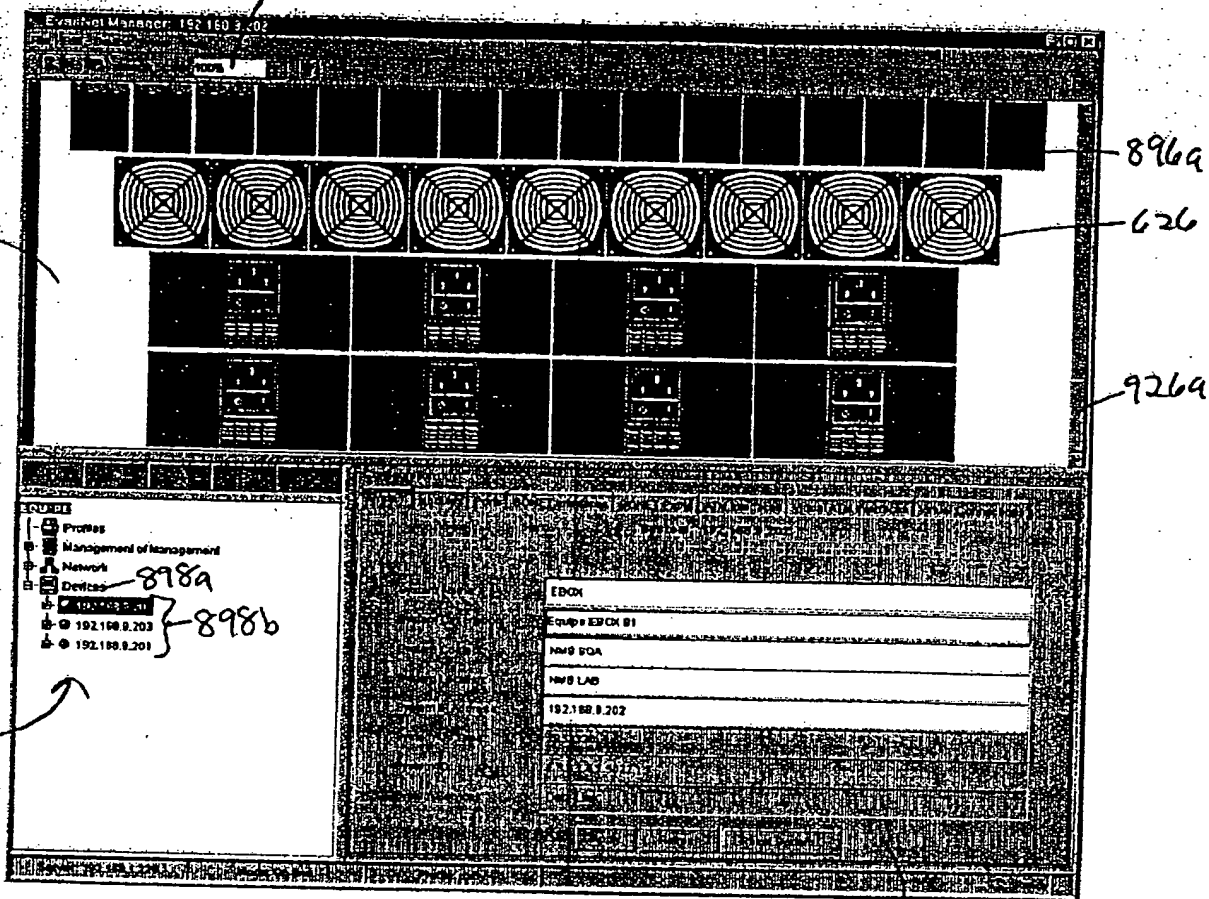


Fig. 4K

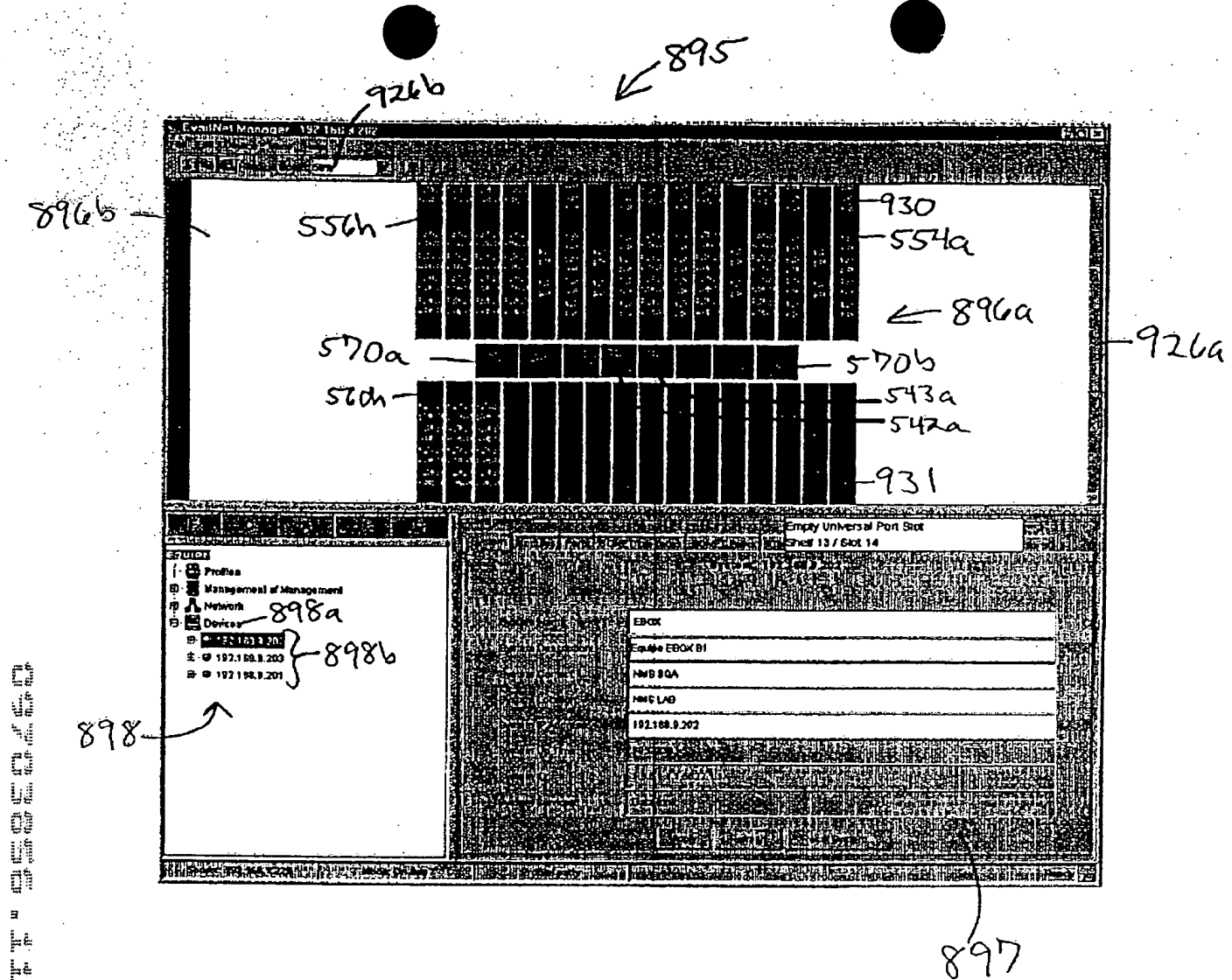
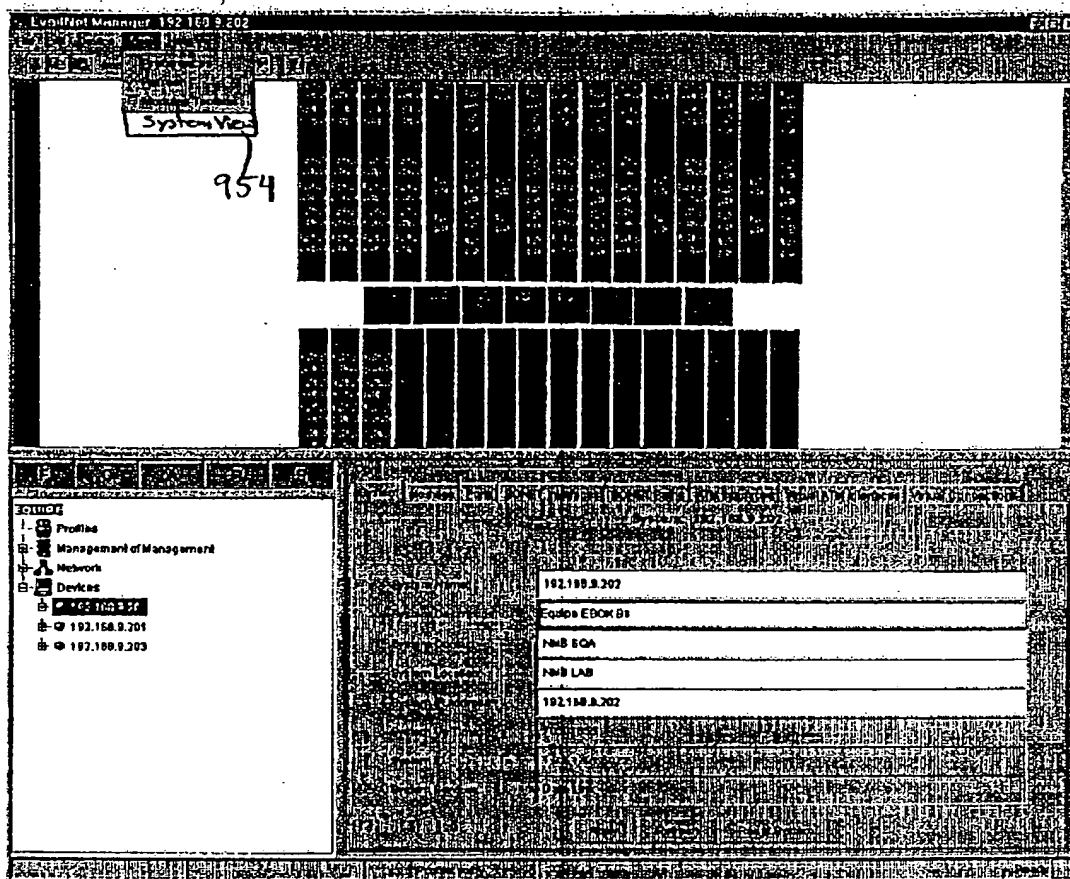
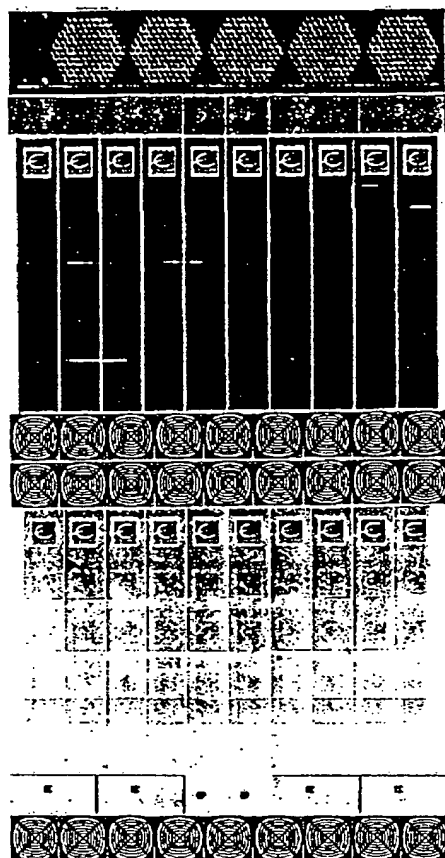


Fig. 41

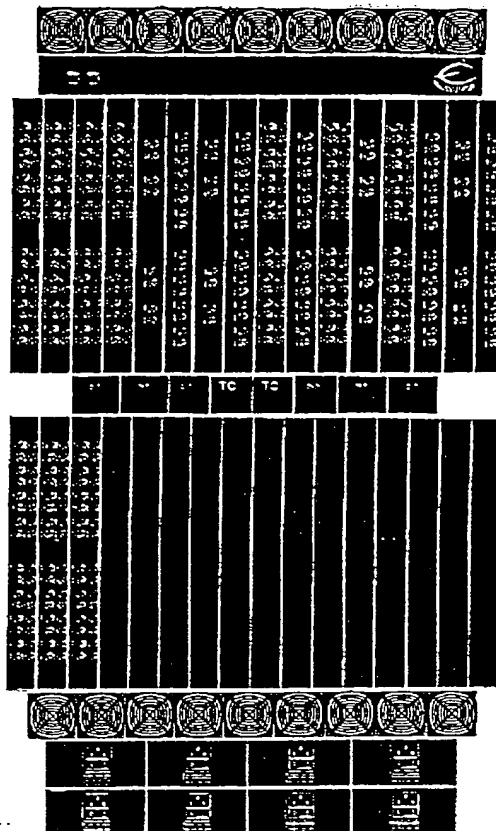




955



955a



955b

Fig. 4n

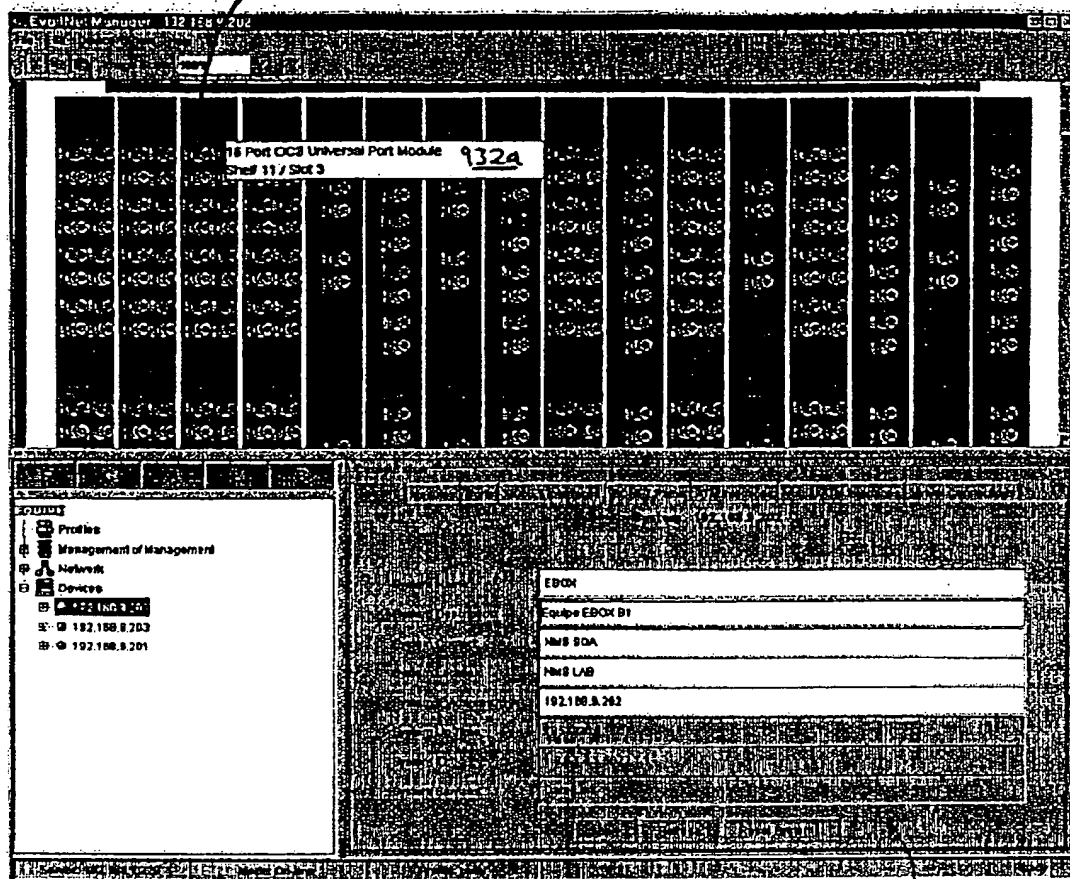


Fig.40

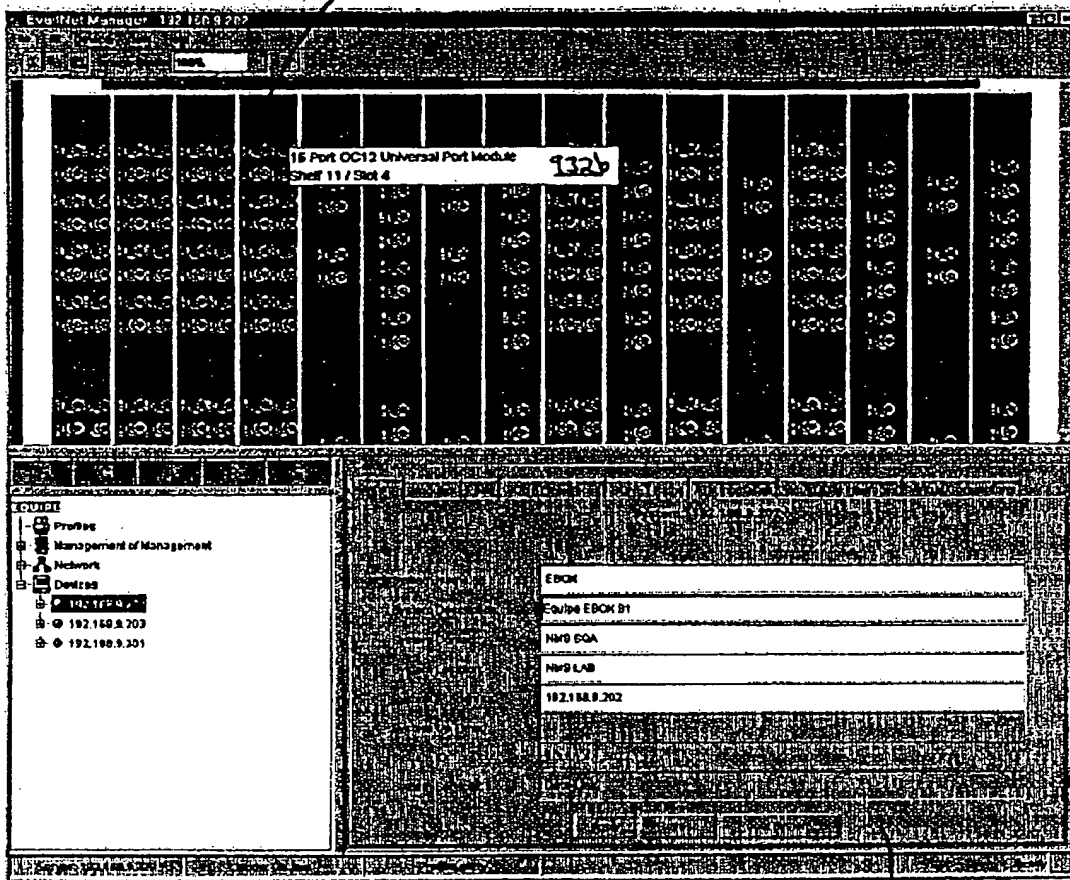
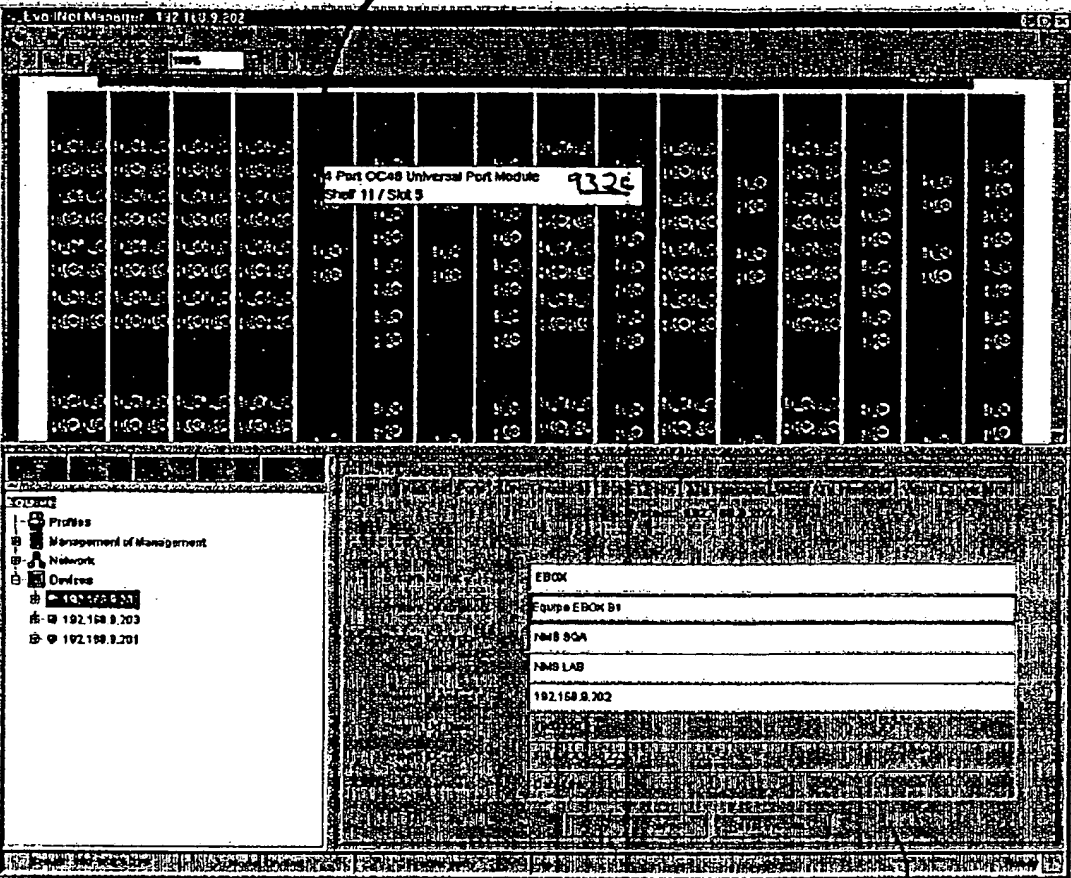


Fig. 4p



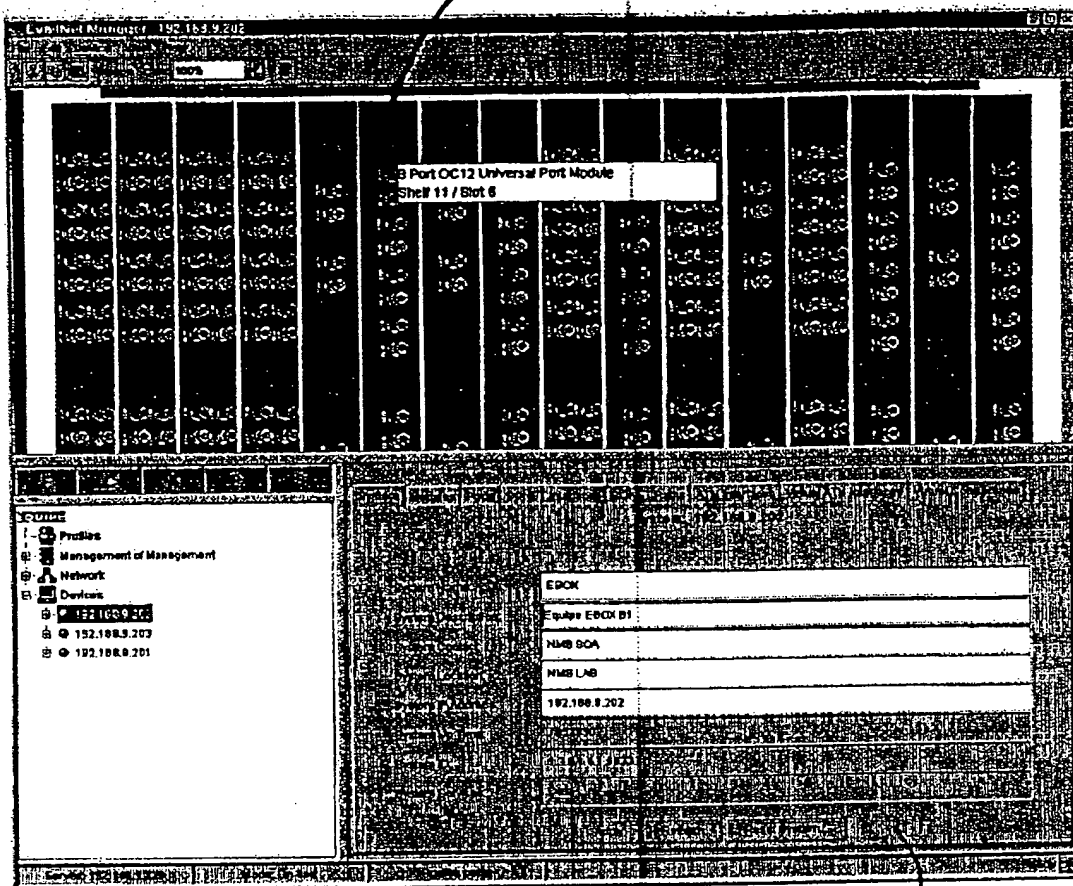


Fig. 4r

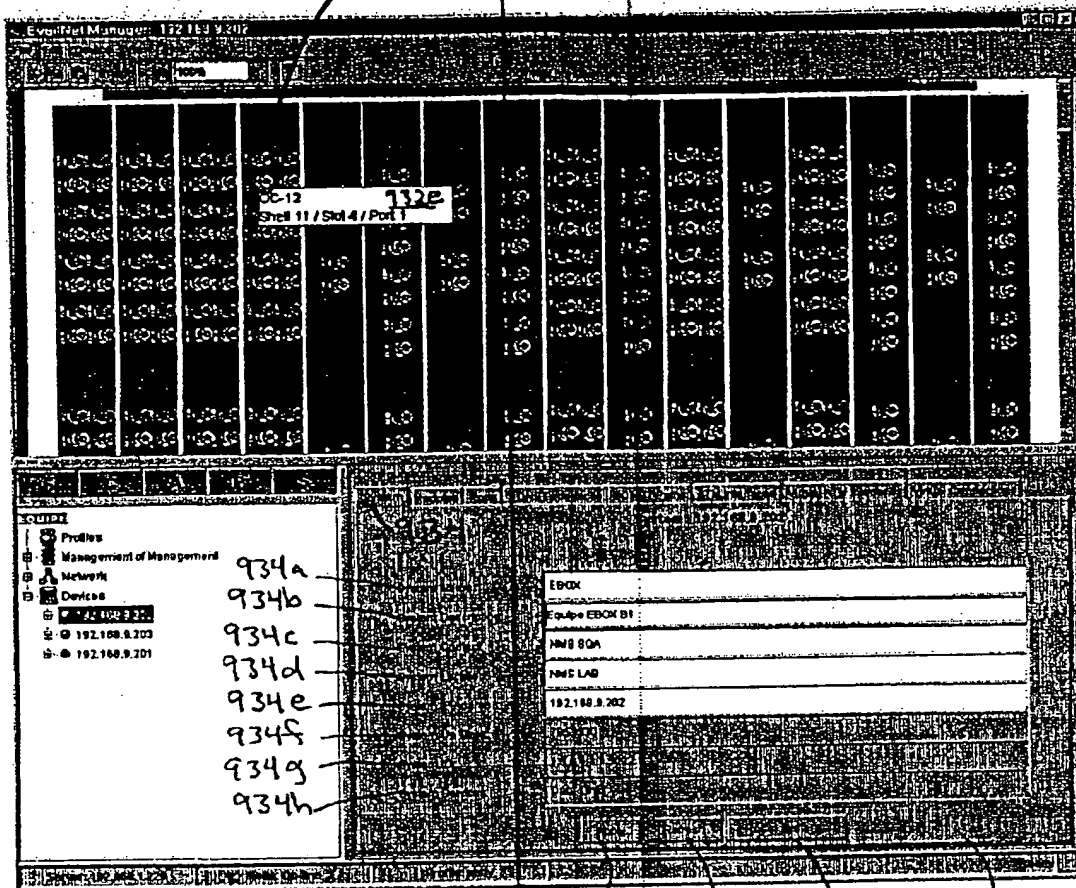
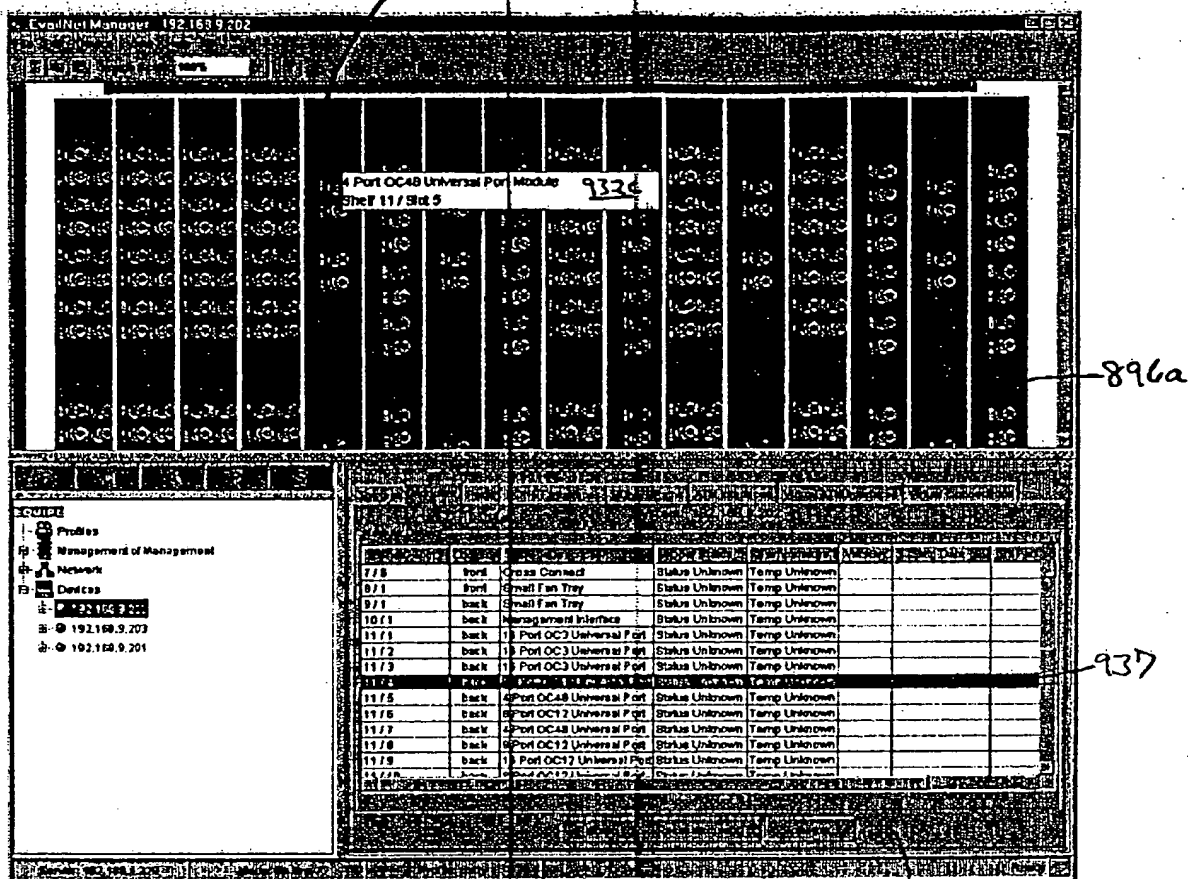


Fig. 4s



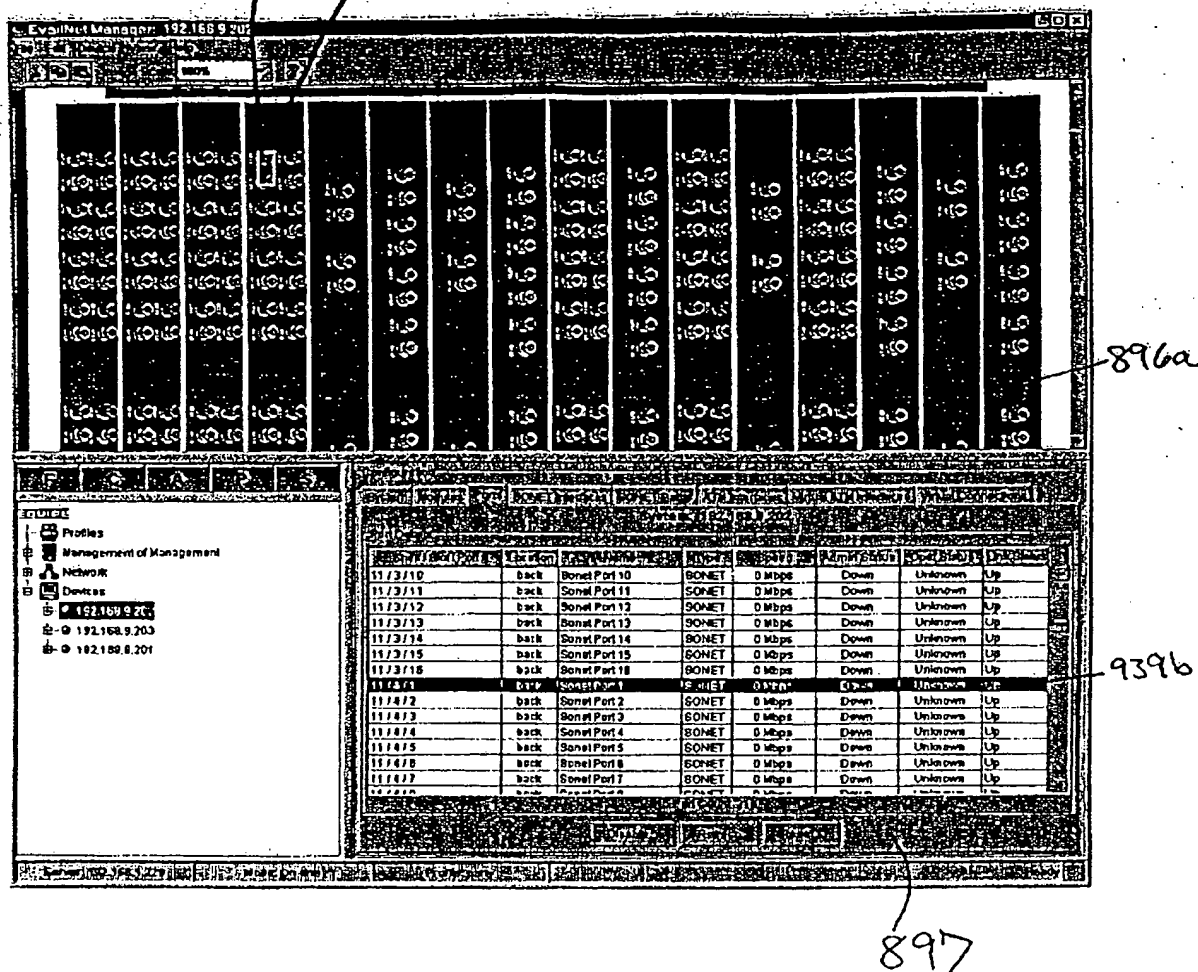
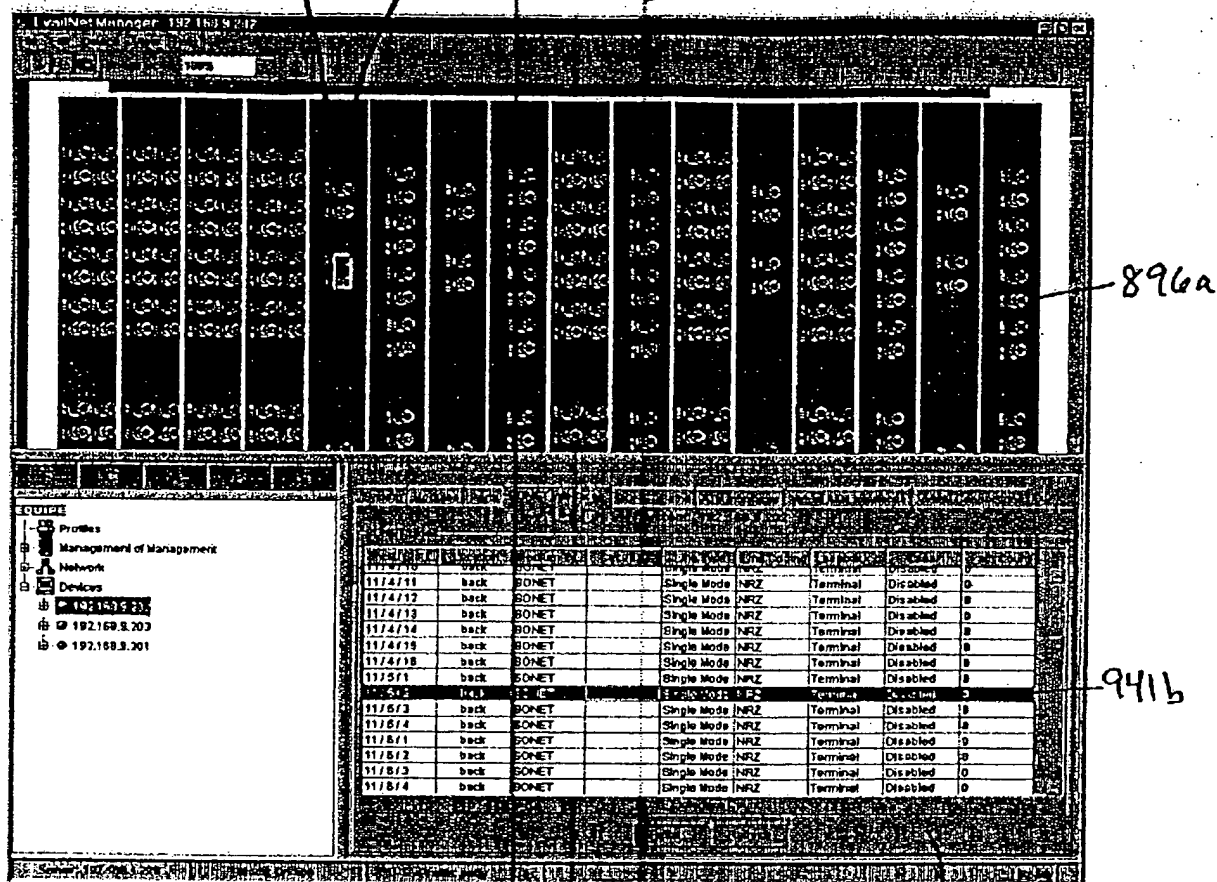


Fig. 4u





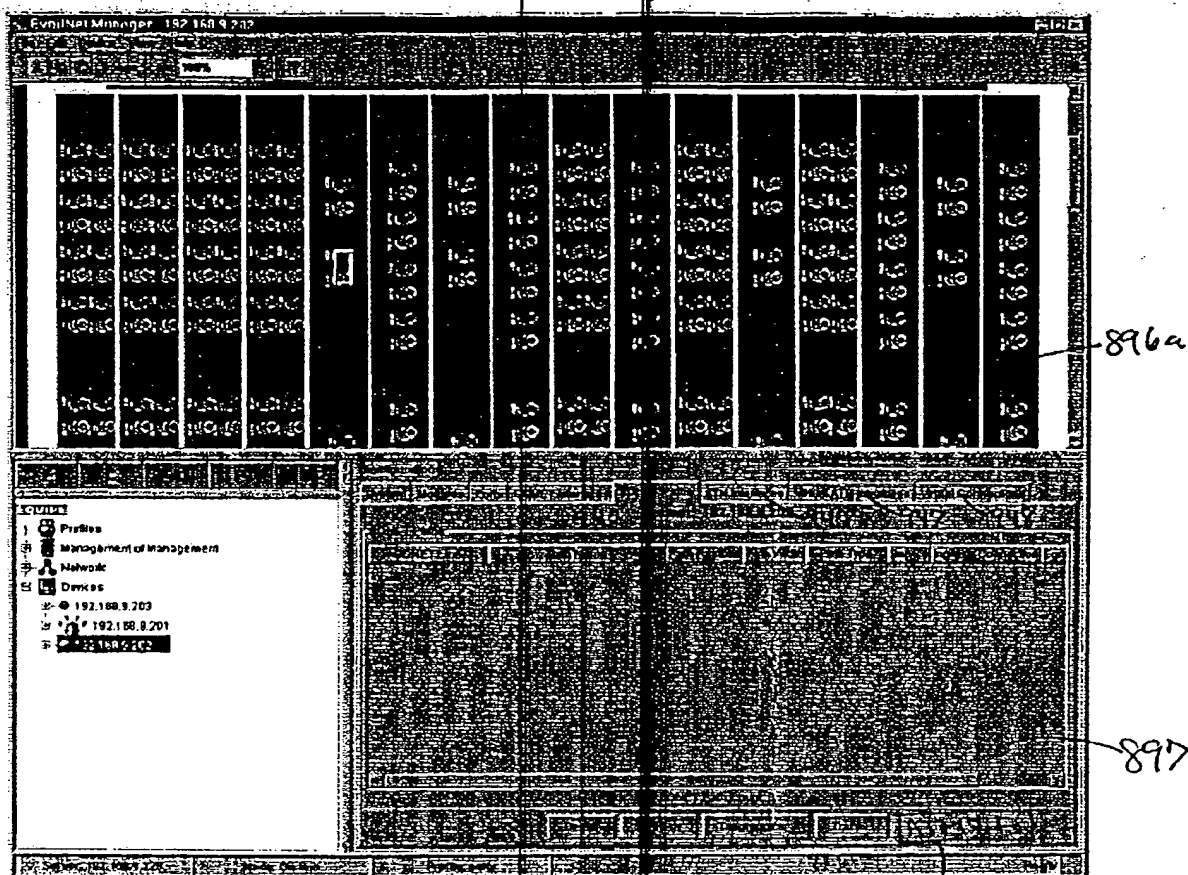


Fig. 4w

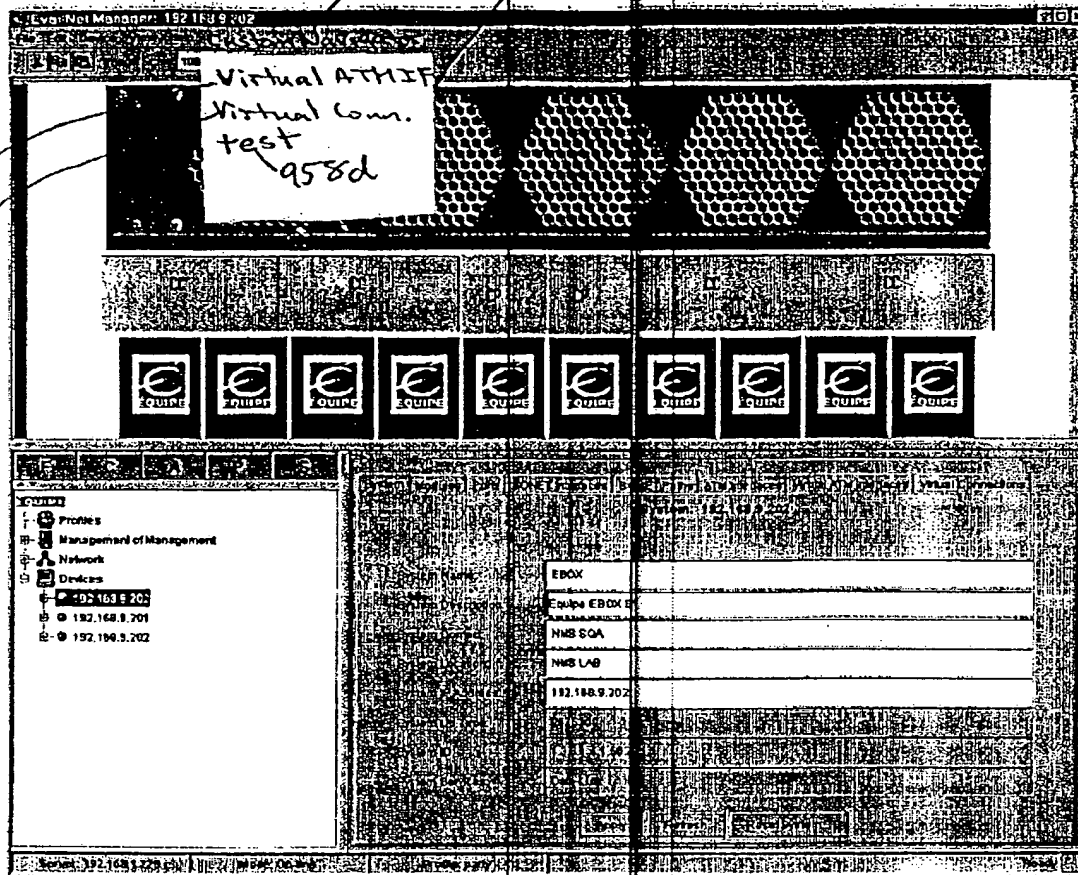


Fig. 4X

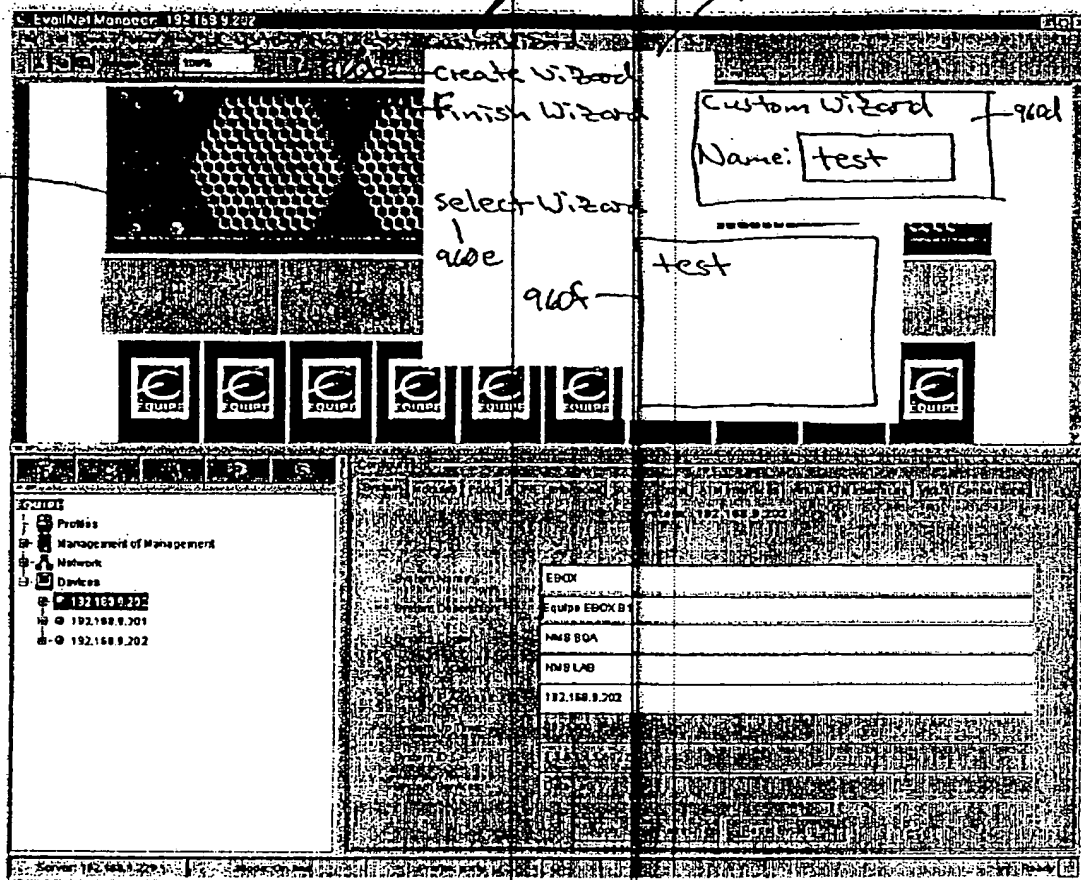


Fig. 4y

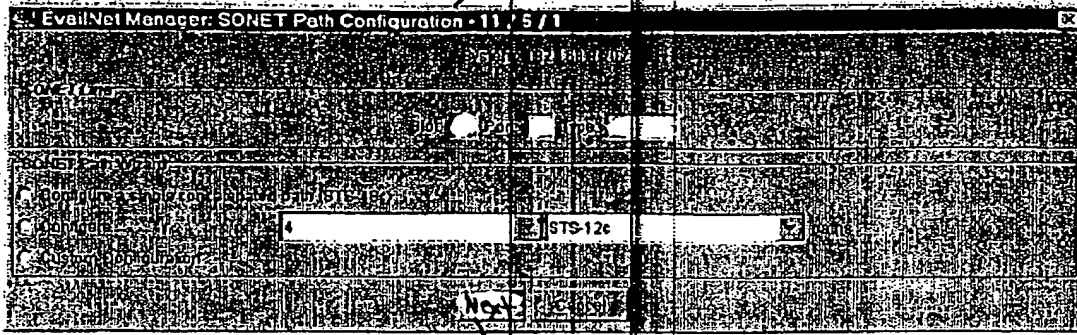


Fig. 42

Doc. Ref. 961a

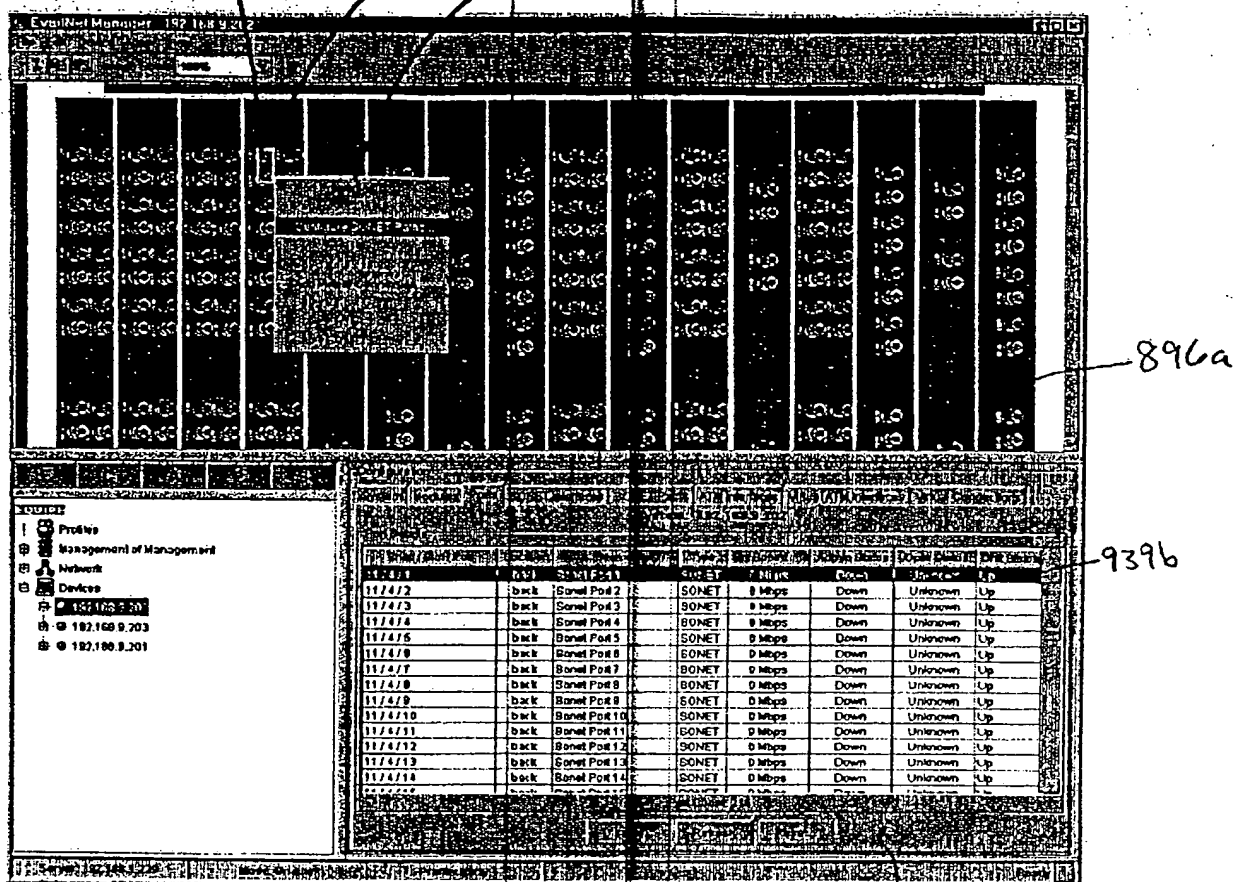


Fig. 5b

944

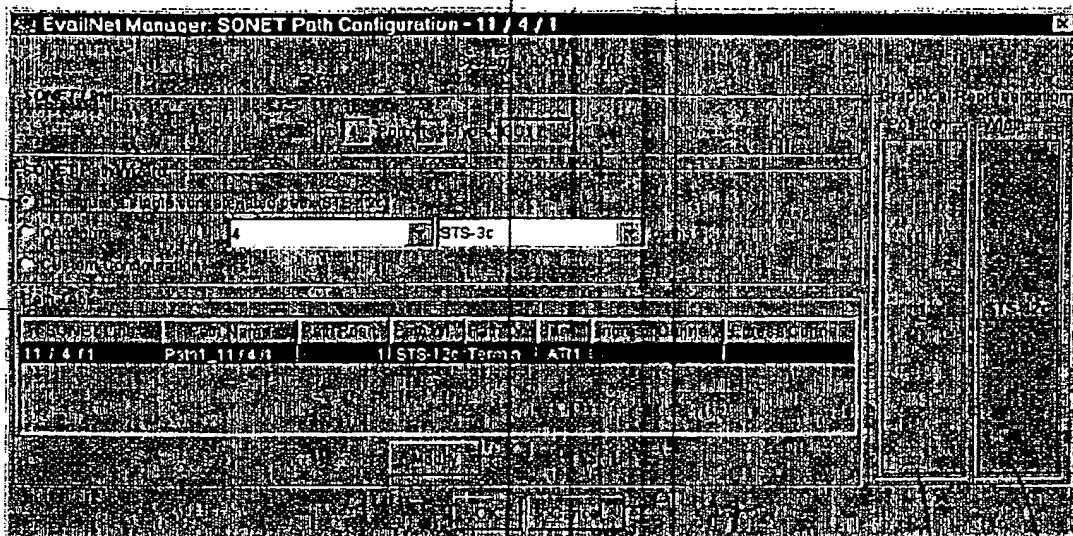
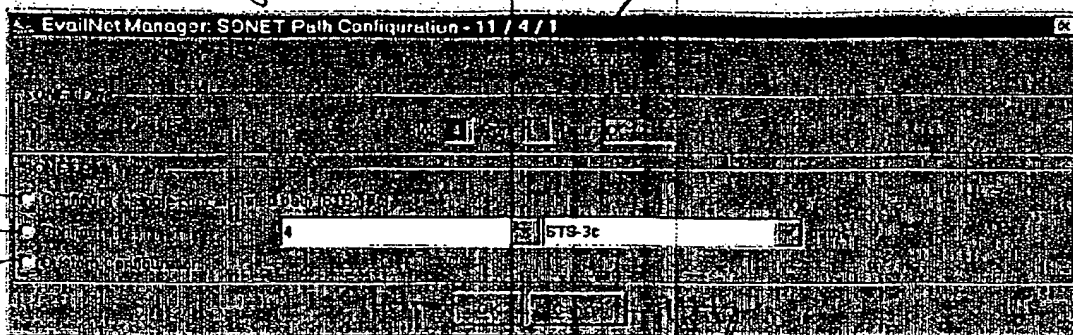


Fig. 5c

Fig. 5d

944

944a

944c

944g

EvailNet Manager: SONET Path Configuration - 11 / 4 / 1

| SONET ID   | Path ID        | Path Label | Path Number | Path Type  | Path Status | Path Protocol | Path Description |
|------------|----------------|------------|-------------|------------|-------------|---------------|------------------|
| 11 / 4 / 1 | Path1_11 / ... | 1          | STS-3c      | Terminated | ATM         |               |                  |
| 11 / 4 / 1 | Path2_11 / ... | 4          | STS-3c      | Terminated | ATM         |               |                  |
| 11 / 4 / 1 | Path3_11 / ... | 7          | STS-3c      | Terminated | ATM         |               |                  |
| 11 / 4 / 1 | Path4_11 / ... | 10         | STS-3c      | Terminated | ATM         |               |                  |

944f 944e

944a

944c

944g

EvailNet Manager: SONET Path Configuration - 11 / 4 / 1

| SONET ID   | Path ID        | Path Label | Path Number | Path Type  | Path Status | Path Protocol | Path Description |
|------------|----------------|------------|-------------|------------|-------------|---------------|------------------|
| 11 / 4 / 1 | Path1_11 / ... | 1          | STS-12c     | Terminated | ATM         |               |                  |

944 944e 944f

Fig. 5e



Fig. 5f

944

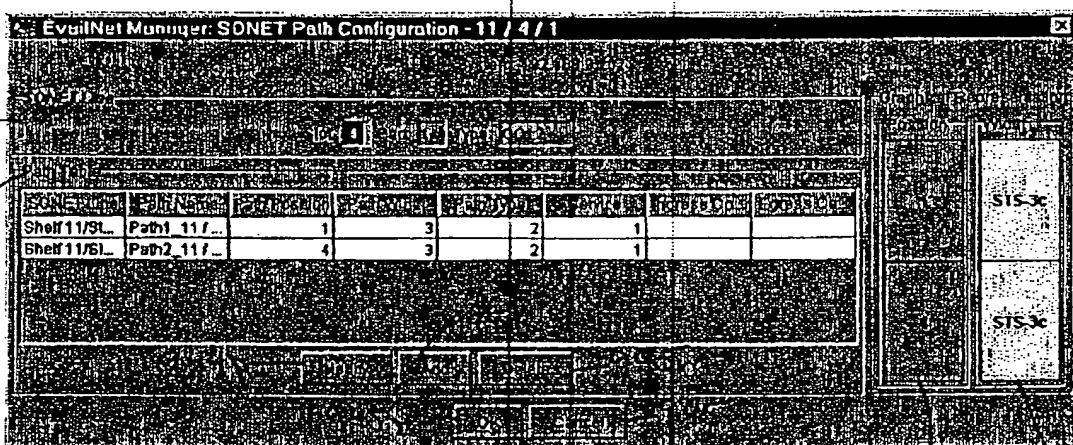
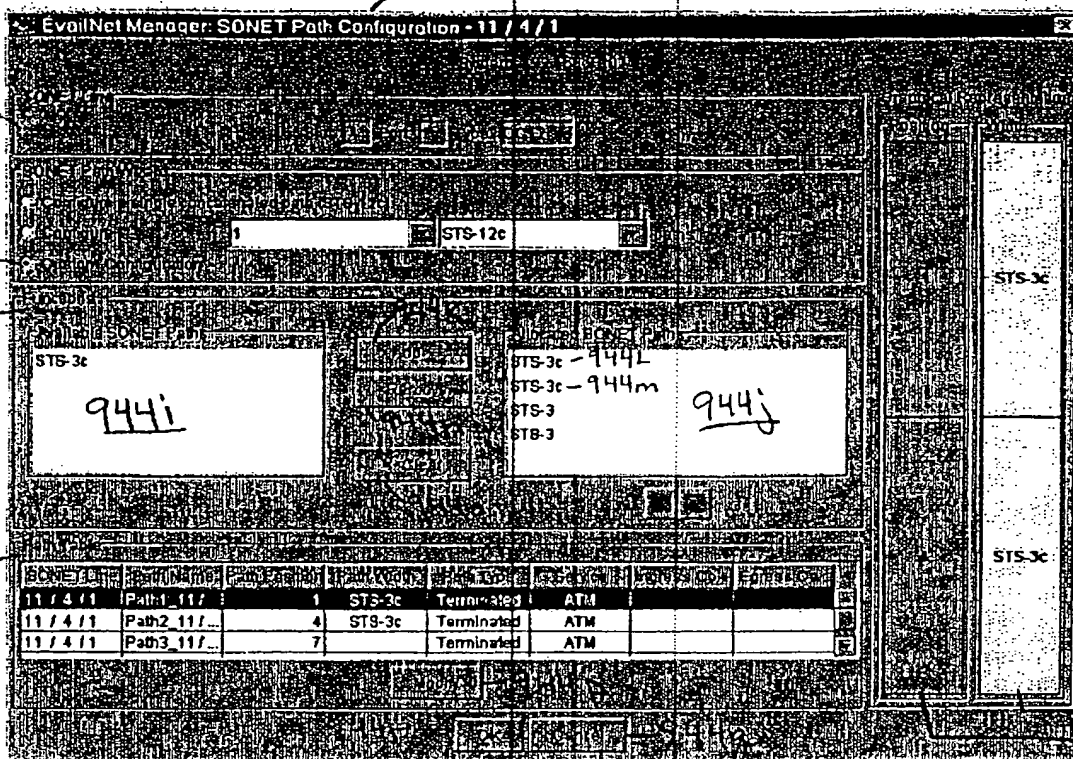


Fig. 5g

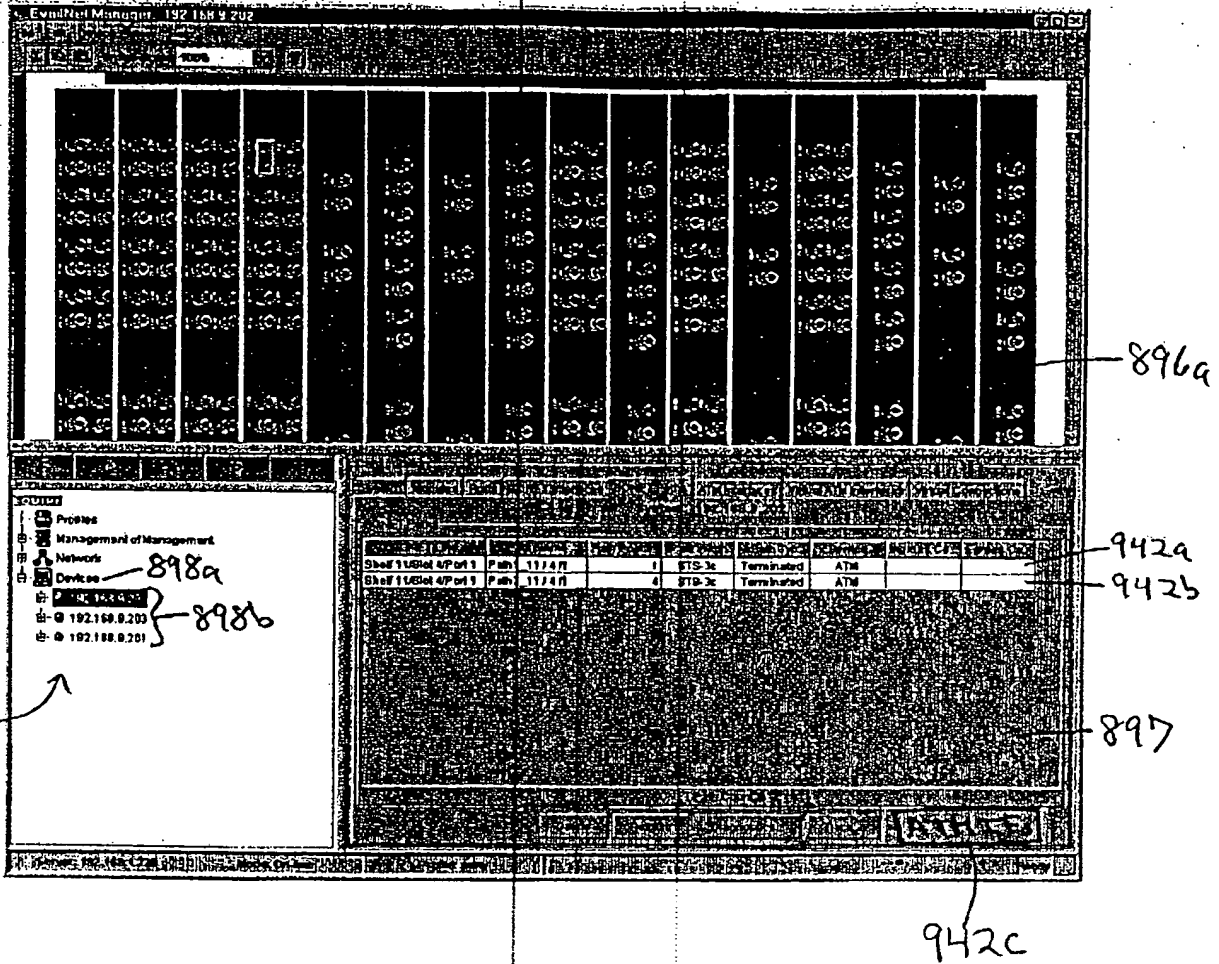
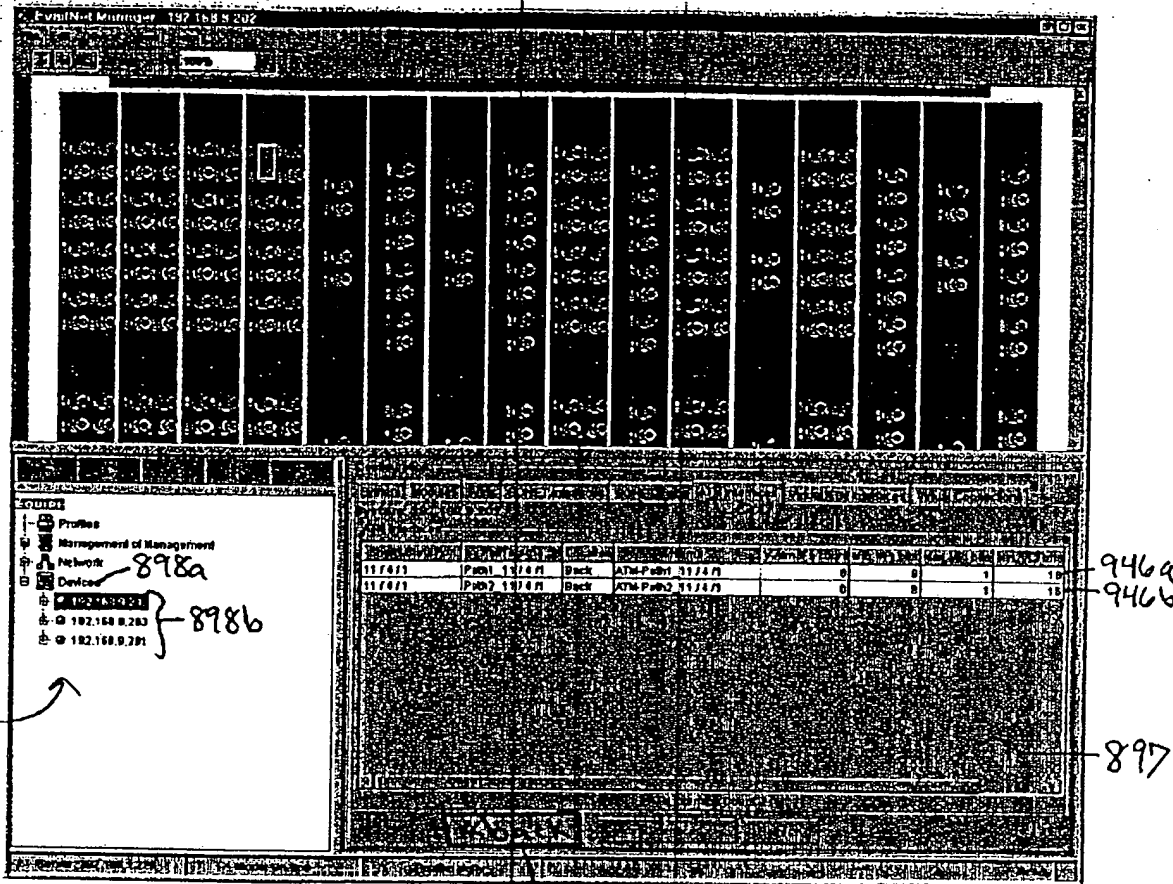


Fig. 5h

✓ 895



946a  
946b

19466

-897

9466

Fig. 5:

Fig. 5j

556d 941a 895

896a

898

898a

898b

940a

949a

The screenshot shows the 'EvailNet Manager' window. The top section displays a list of profiles. The bottom section contains a table with the following data:

| Profile | Back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
|---------|------|-------|-------------|-----|----------|----------|---|
| 11/1/14 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/15 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/16 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/17 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/18 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/19 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/20 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/21 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/22 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/23 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/24 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/25 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/26 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/27 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/28 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/29 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/30 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |

Fig. 5K

944b

944c

944d

944a

944

The screenshot shows the 'EvailNet Manager: SONET Path Configuration - 11 / 5 / 2' window. It displays a configuration table with the following data:

| Profile | Back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
|---------|------|-------|-------------|-----|----------|----------|---|
| 11/1/14 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/15 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/16 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/17 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/18 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/19 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/20 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/21 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/22 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/23 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/24 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/25 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/26 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/27 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/28 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/29 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |
| 11/1/30 | back | SONET | Single Mode | NRZ | Terminal | Disabled | 0 |

Fig. 5L

944

944a

944b

944c

944d

944g

EvailNet Manager: SONET Path Configuration - 11 / 5 / 2

Path: 11 / 5 / 2

STS-12c

11 / 5 / 2 Path: 11 / 5 / 2 11 STS-12c Terminated ATM

944f 944e

944a

944b

944c

944d

944g

EvailNet Manager: SONET Path Configuration - 11 / 5 / 2

Path: 11 / 5 / 2

STS-12c

| Path       | Path Name  | Path ID | Path Type | Path Status | Path Type | Path Status | Path Type |
|------------|------------|---------|-----------|-------------|-----------|-------------|-----------|
| 11 / 5 / 2 | Path1 11 / | 1       | STS-12c   | Terminated  | ATM       |             |           |
| 11 / 5 / 2 | Path2 11 / | 13      | STS-12c   | Terminated  | ATM       |             |           |
| 11 / 5 / 2 | Path3 11 / | 25      | STS-12c   | Terminated  | ATM       |             |           |
| 11 / 5 / 2 | Path4 11 / | 37      | STS-12c   | Terminated  | ATM       |             |           |

944f 944e

Fig. 5m

944

Fig. 5n

944

944a

944b

944c

944d

944g

EvailNet Manager: SONET Path Configuration - 11/5/2

| Path | Path ID | Path Name | Path Type | Path Status |
|------|---------|-----------|-----------|-------------|
| 1    | 1       | STB-48c   | Termi     | ATM         |
| 4    | 4       | 944s      | Termi     | ATM         |
| 16   | 16      | STB-48c   | Termi     | ATM         |

11/5/2 Path1\_11/5/2 1: STB-48c Termi: ATM

944f  
944e

944a

944b

944c

944d

944g

EvailNet Manager: SONET Path Configuration - 11/5/2

| Path | Path ID | Path Name | Path Type | Path Status |
|------|---------|-----------|-----------|-------------|
| 1    | 1       | STB-3c    | Termi     | ATM         |
| 4    | 4       | STB-3c    | Termi     | ATM         |
| 7    | 7       | STB-3c    | Termi     | ATM         |
| 10   | 10      | STB-3c    | Termi     | ATM         |
| 13   | 13      | STB-3c    | Termi     | ATM         |
| 16   | 16      | STB-3c    | Termi     | ATM         |
| 19   | 19      | STB-3c    | Termi     | ATM         |

11/5/2 Path1\_11/5/2 1: STB-3c Termi: ATM

| Path | Path ID | Path Name | Path Type | Path Status |
|------|---------|-----------|-----------|-------------|
| 1    | 1       | STB-3c    | Termi     | ATM         |
| 2    | 2       | STB-3c    | Termi     | ATM         |
| 3    | 3       | STB-3c    | Termi     | ATM         |
| 4    | 4       | STB-3c    | Termi     | ATM         |
| 5    | 5       | STB-3c    | Termi     | ATM         |
| 6    | 6       | STB-3c    | Termi     | ATM         |
| 7    | 7       | STB-3c    | Termi     | ATM         |
| 8    | 8       | STB-3c    | Termi     | ATM         |
| 9    | 9       | STB-3c    | Termi     | ATM         |
| 10   | 10      | STB-3c    | Termi     | ATM         |
| 11   | 11      | STB-3c    | Termi     | ATM         |
| 12   | 12      | STB-3c    | Termi     | ATM         |
| 13   | 13      | STB-3c    | Termi     | ATM         |
| 14   | 14      | STB-3c    | Termi     | ATM         |
| 15   | 15      | STB-3c    | Termi     | ATM         |
| 16   | 16      | STB-3c    | Termi     | ATM         |
| 17   | 17      | STB-3c    | Termi     | ATM         |
| 18   | 18      | STB-3c    | Termi     | ATM         |
| 19   | 19      | STB-3c    | Termi     | ATM         |

944f  
944e

944

Fig. 5o

944a

944b

944c

944d

944h

944g

EvailNet Manager: SONET Path Configuration - 11 / 5 / 2

16 STS-3c

STS-3c  
STS-12c 944i

STS-3c  
STS-3c  
STS-3  
STS-3  
STS-12c 944j

| Path       | Path Name | Path ID | Path Type | Path Status | Path Type | Path Type | Path Type |
|------------|-----------|---------|-----------|-------------|-----------|-----------|-----------|
| 11 / 5 / 2 | Path1_111 | 1       | STS-3c    | Terminated  | ATM       |           |           |
| 11 / 5 / 2 | Path2_111 | 4       | STS-3c    | Terminated  | ATM       |           |           |
| 11 / 5 / 2 | Path3_111 | 7       |           | Terminated  | ATM       |           |           |

944k

944l

944m

944n

944o

944p

944q

944r

944s

944t

944u

944v

944w

944x

944y

944z

Fig. 5p



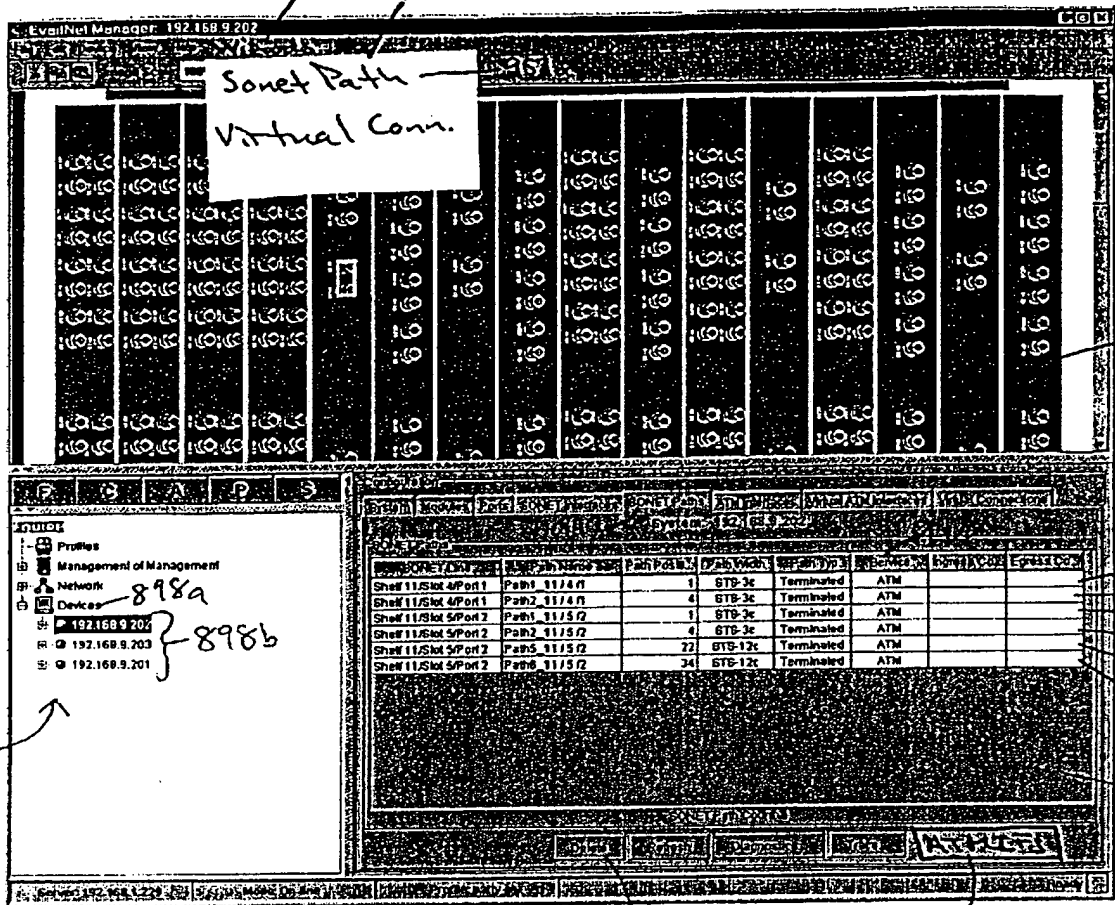
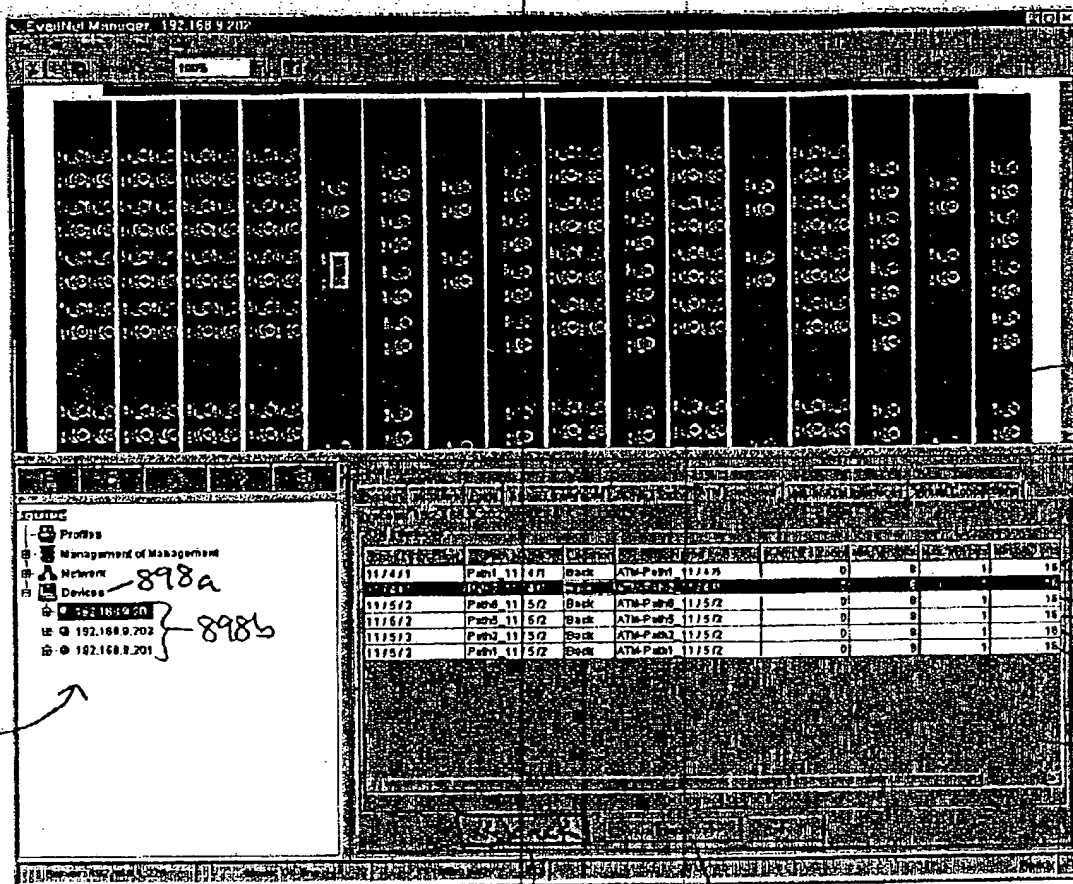
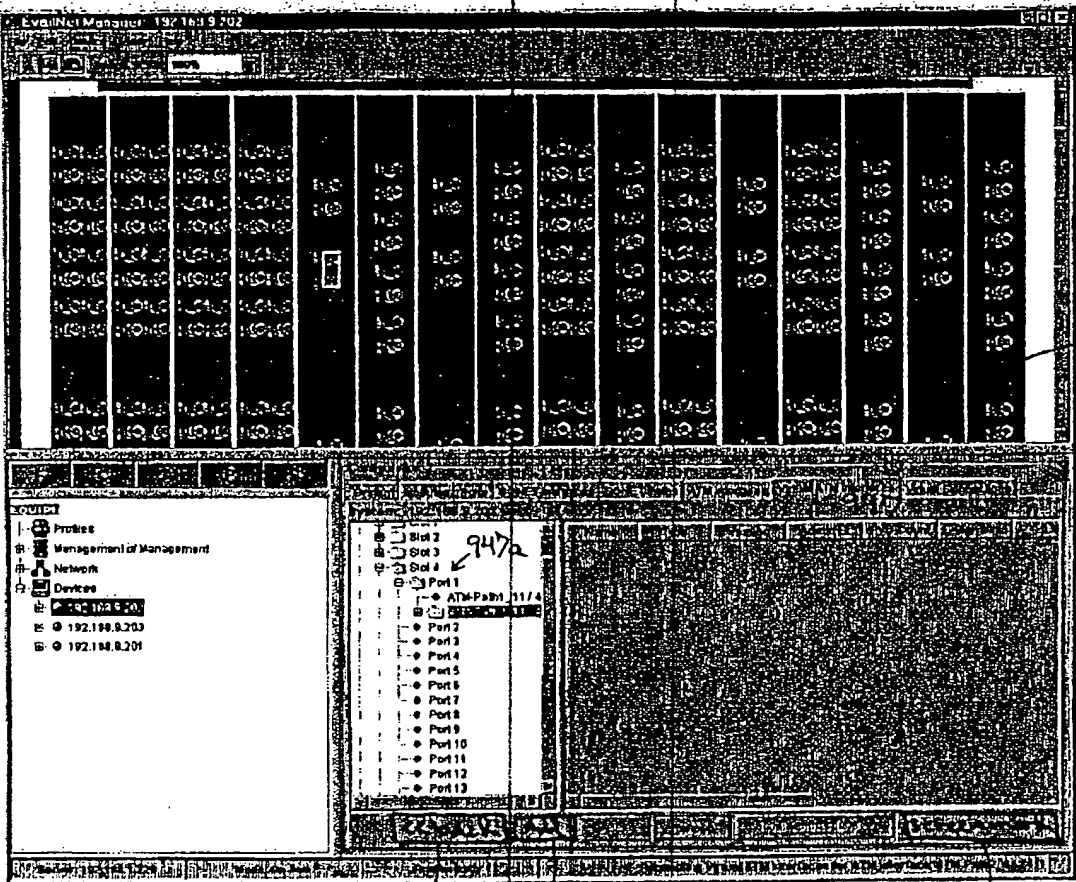


Fig. 5g







950

950c

9476

Fig. 5u

556d 941a

← 895

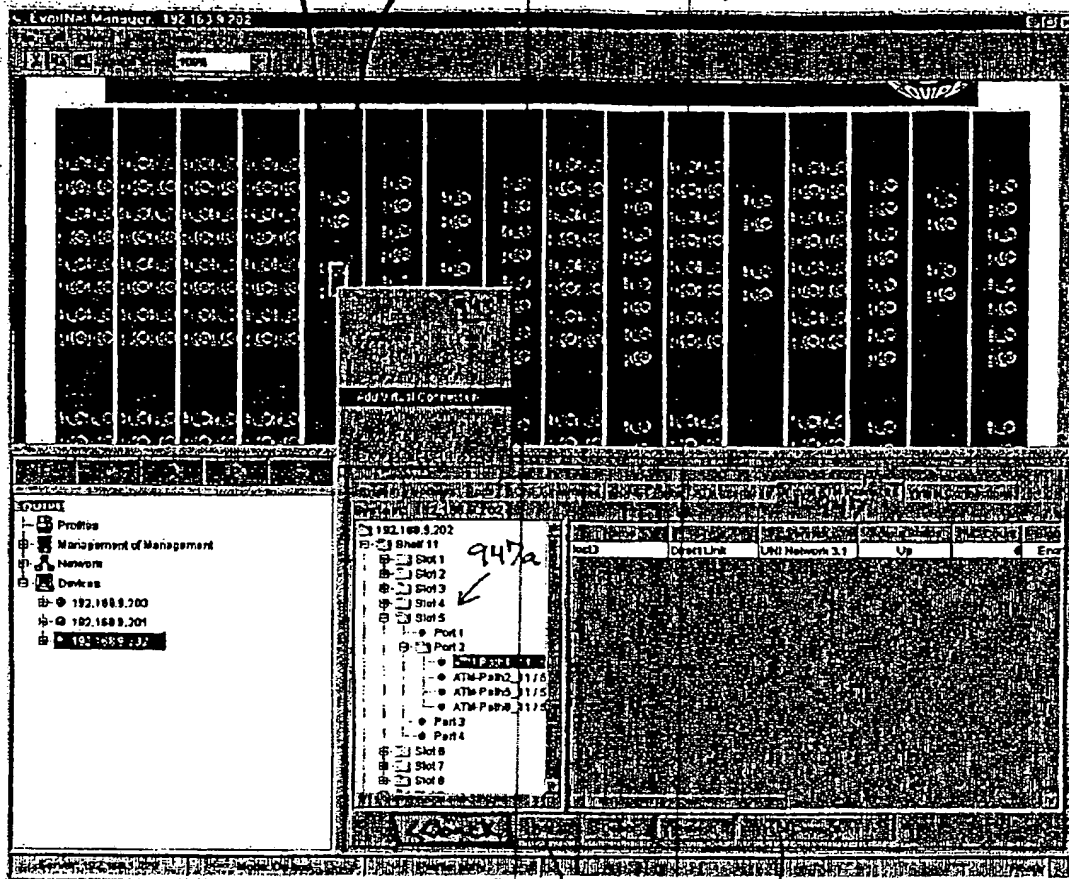


Fig. 5v

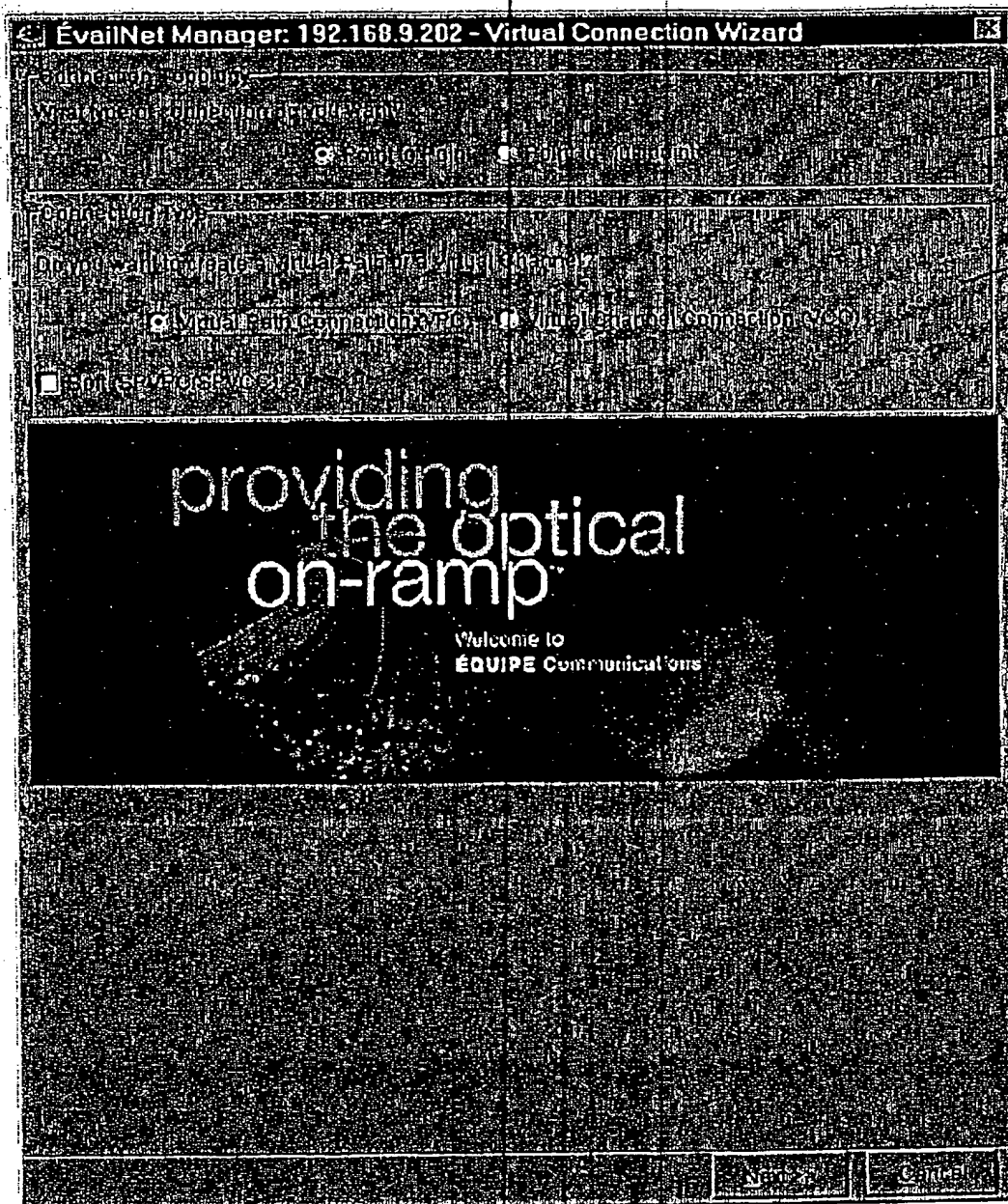


Fig. 5w

← 953

**ÉvailNet Manager: 192.168.9.202 - Virtual Connection Wizard**

Step 1: Select Path

Slot 4

- Port 1
  - ATM-Path1\_11/4/1
  - ATM-Path2\_11/4/1
    - test1
    - test2
- Port 2
- Port 3
- Port 4

Slot 3

- Port 1
- Port 2
  - ATM-Path1\_11/5/2
    - test3
  - ATM-Path2\_11/5/2
  - ATM-Path5\_11/5/2

Connection Parameters

Connection Name: test

Address: Up

Customer Name: Walmart

Simulation Parameters

MTU: 953i

MTU: 953m

Transmit Frame Description: VBR-high

Receive Frame Description: VBR-high

Use the same Frame Description for both Transmit and Receive

Simulation Parameters

MTU: 953s

MTU: 953n

Transmit Frame Description: VBR-high

Receive Frame Description: VBR-high

Use the same Frame Description for both Transmit and Receive

Buttons: Back, Finish, Cancel

Fig. 5x

956

**New Traffic Descriptor**

Name:

QoS Class:  ▼

Type:  ▼

Fig. 5Y

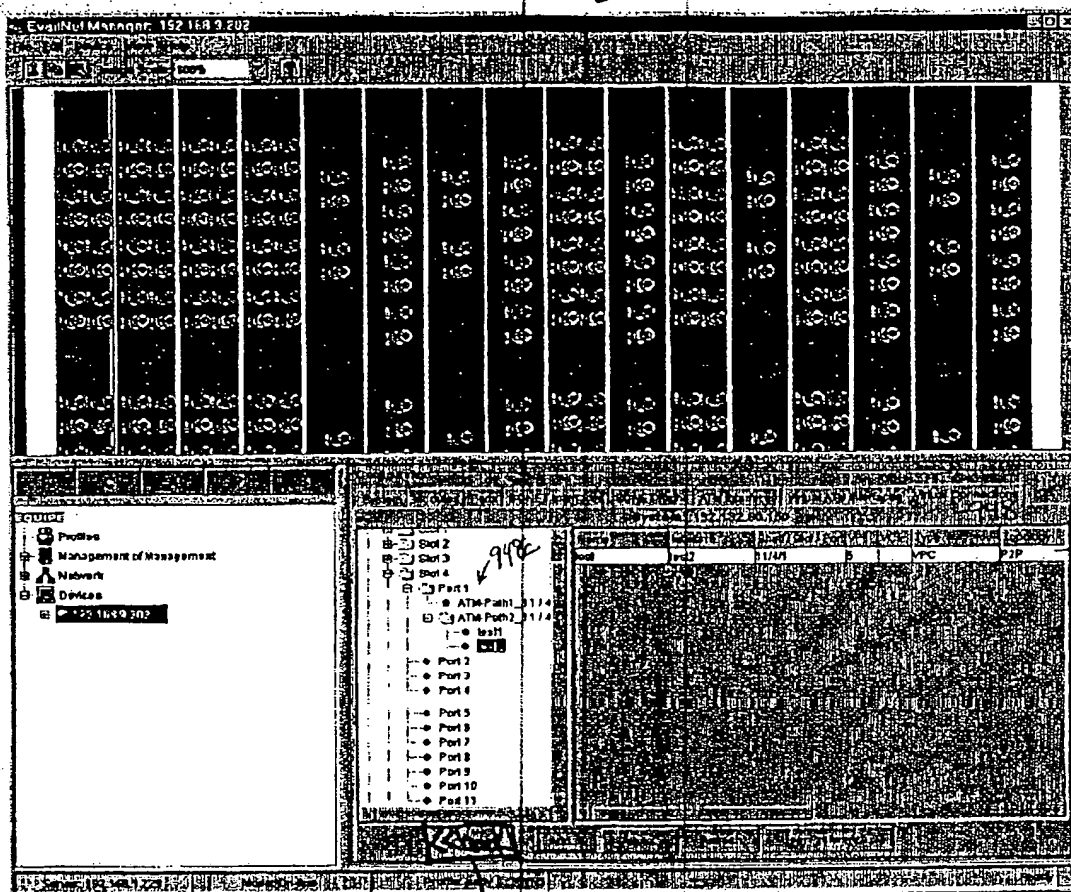


Fig. 57



895

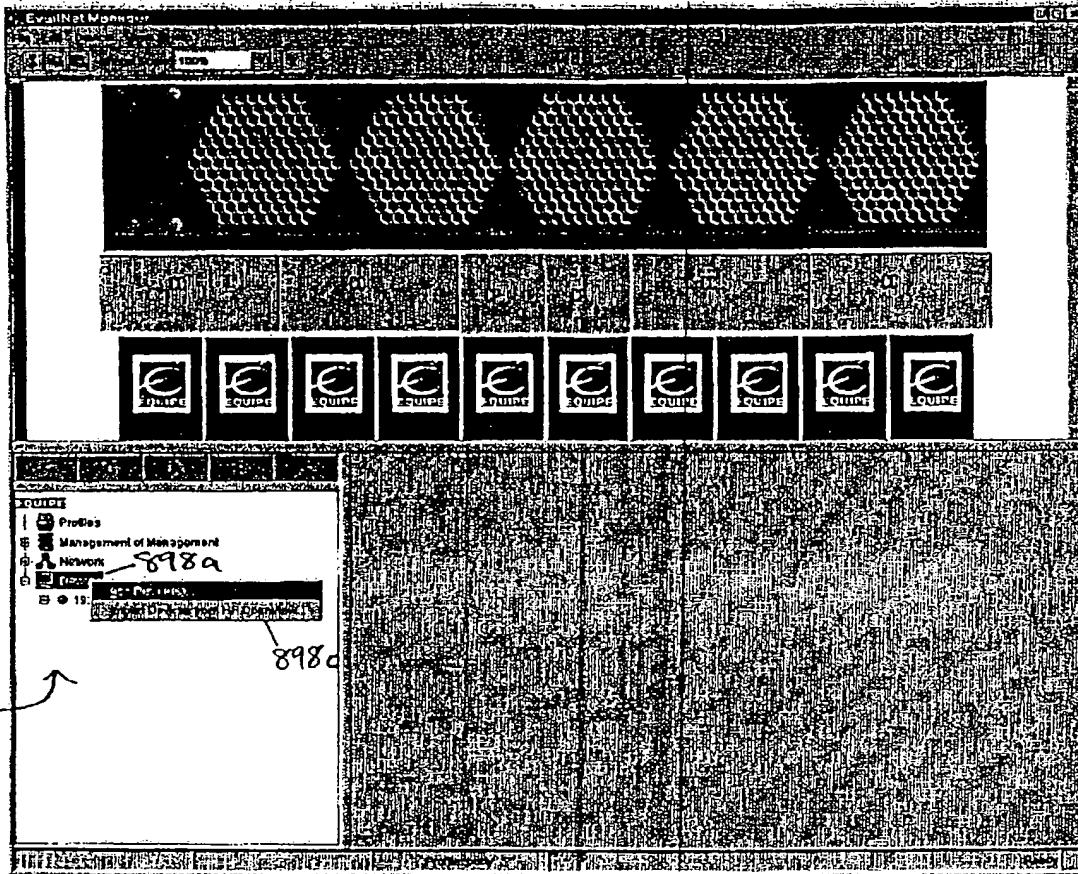


Fig. 6a

Fig. 6b

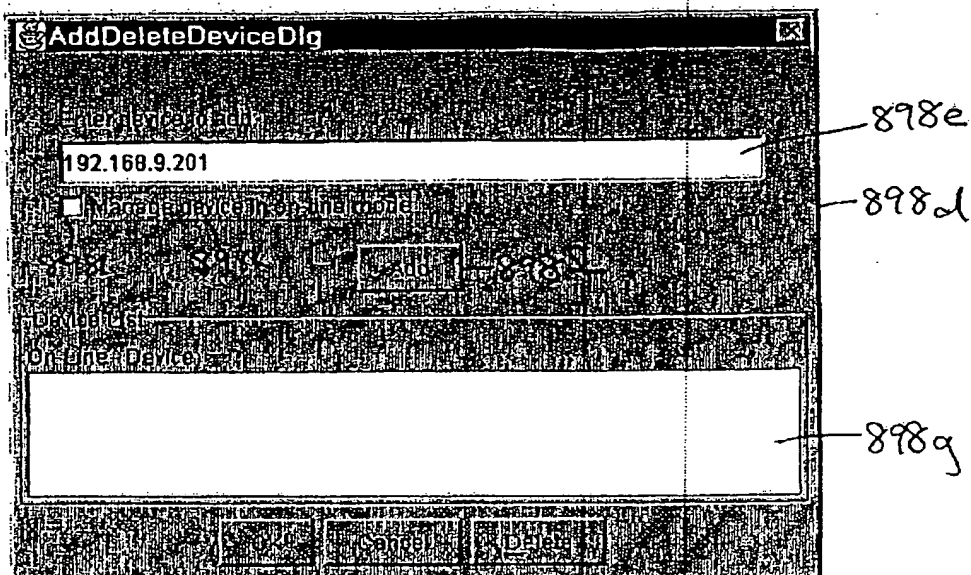
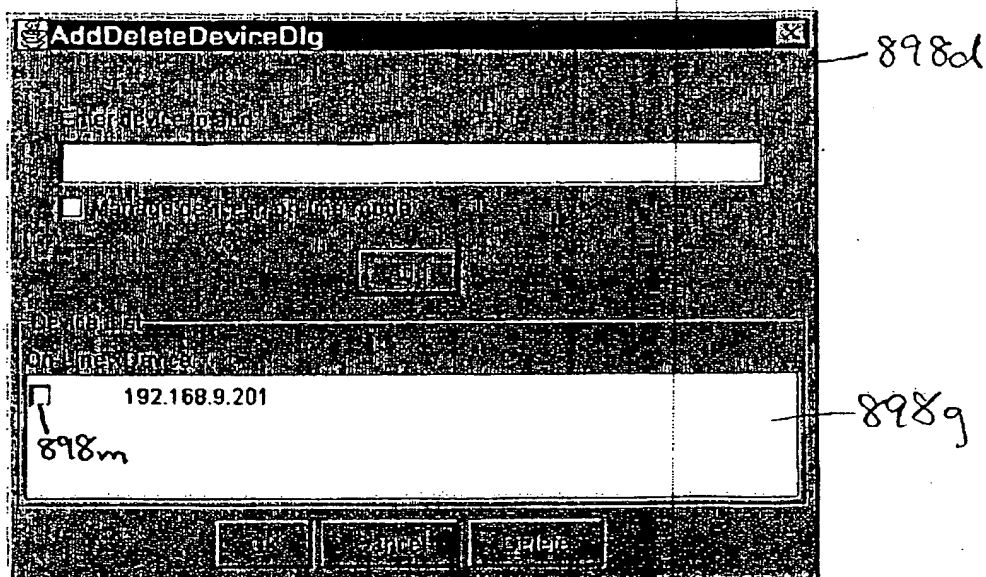


Fig. 6c



895

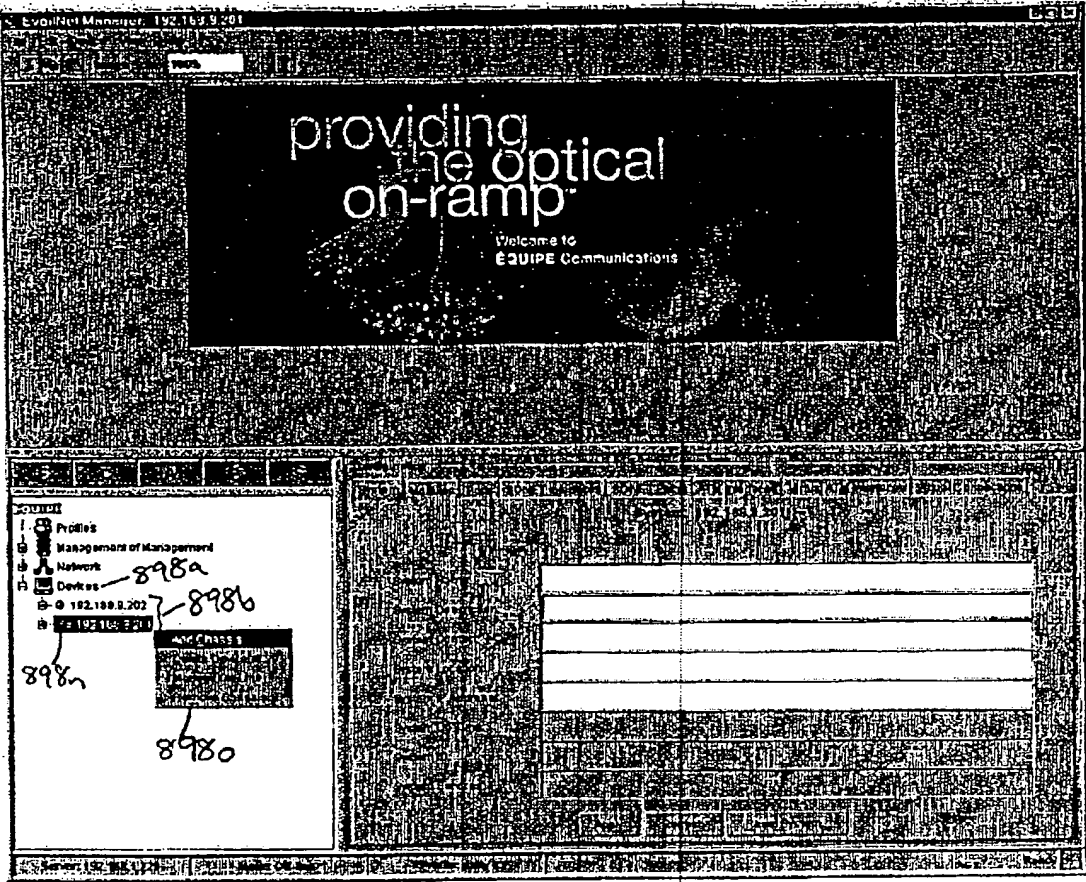


Fig. 6d

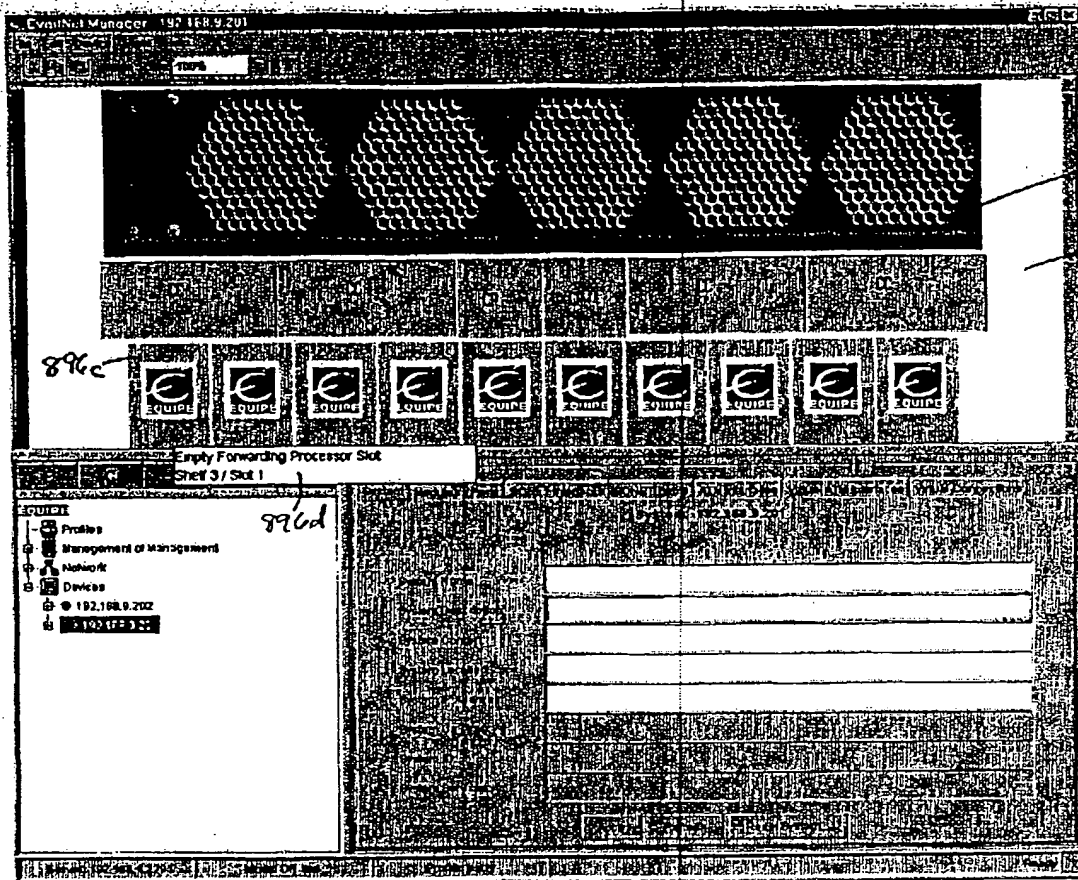


Fig. 6e

895

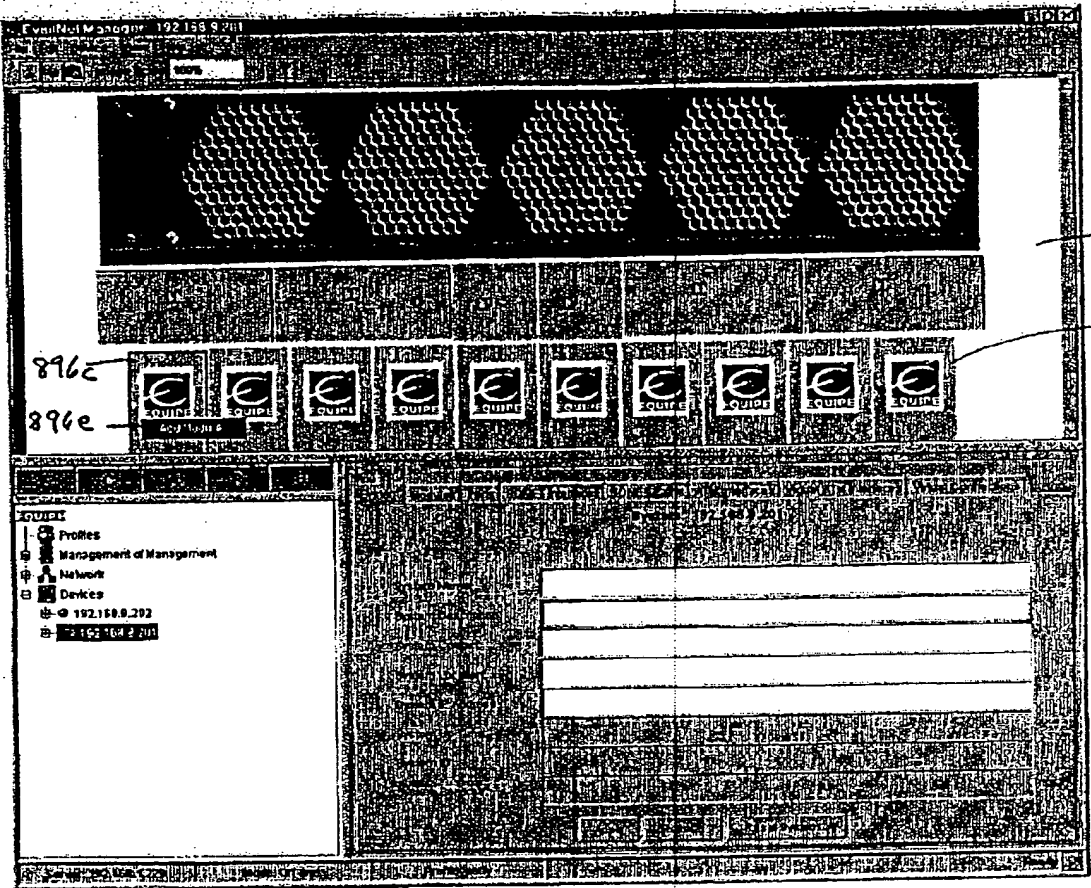


Fig. 6f

895

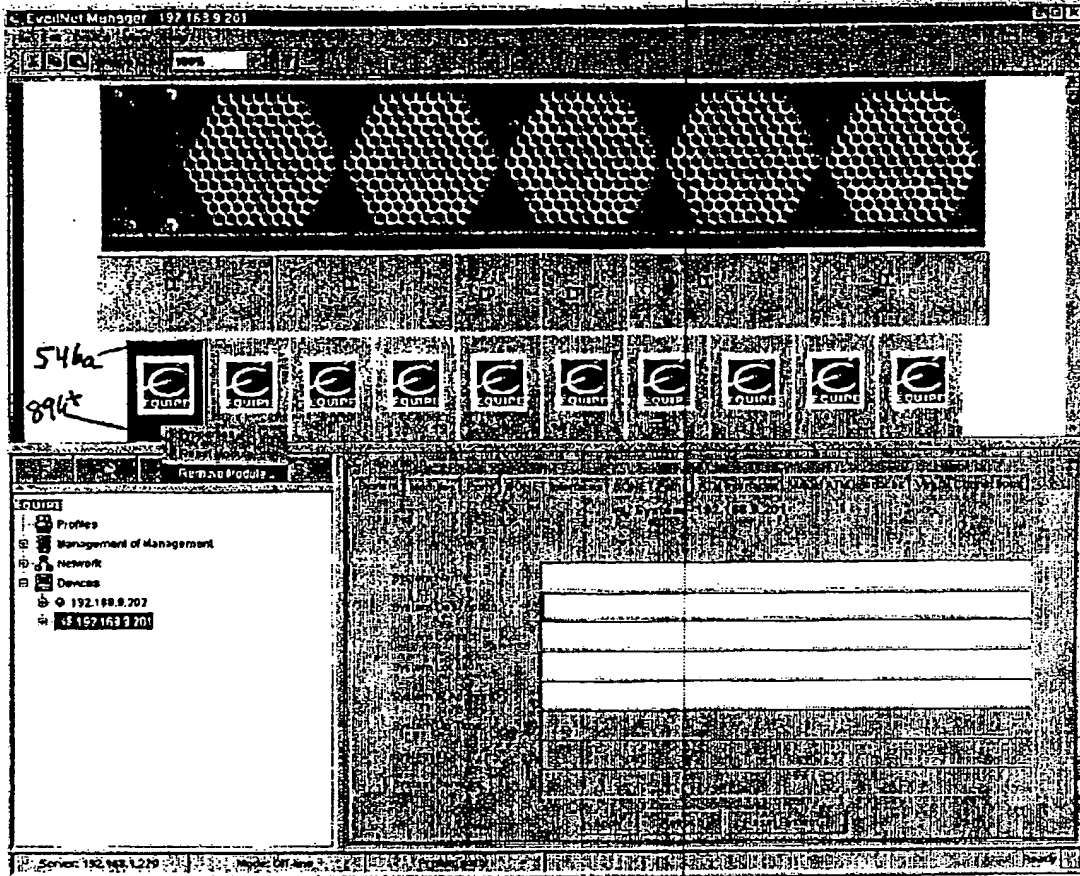


Fig. 69

895

896

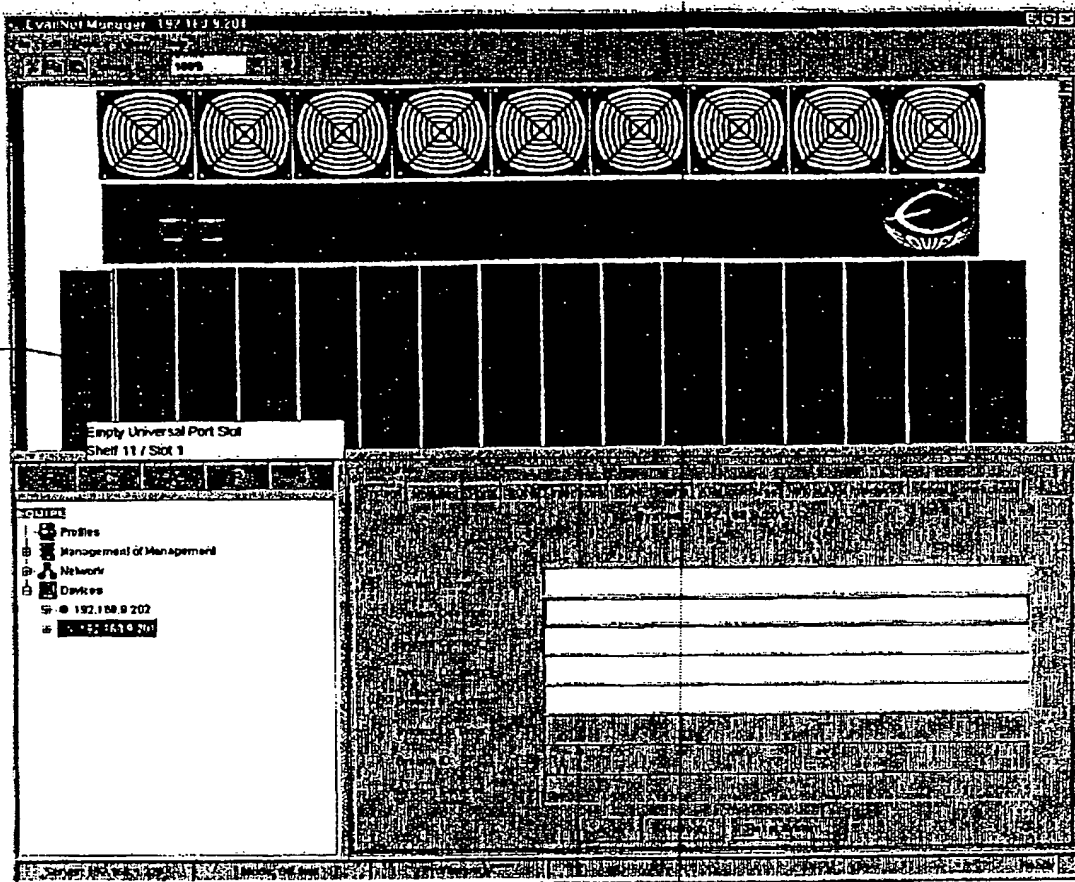


Fig.6h

895

896f

896g

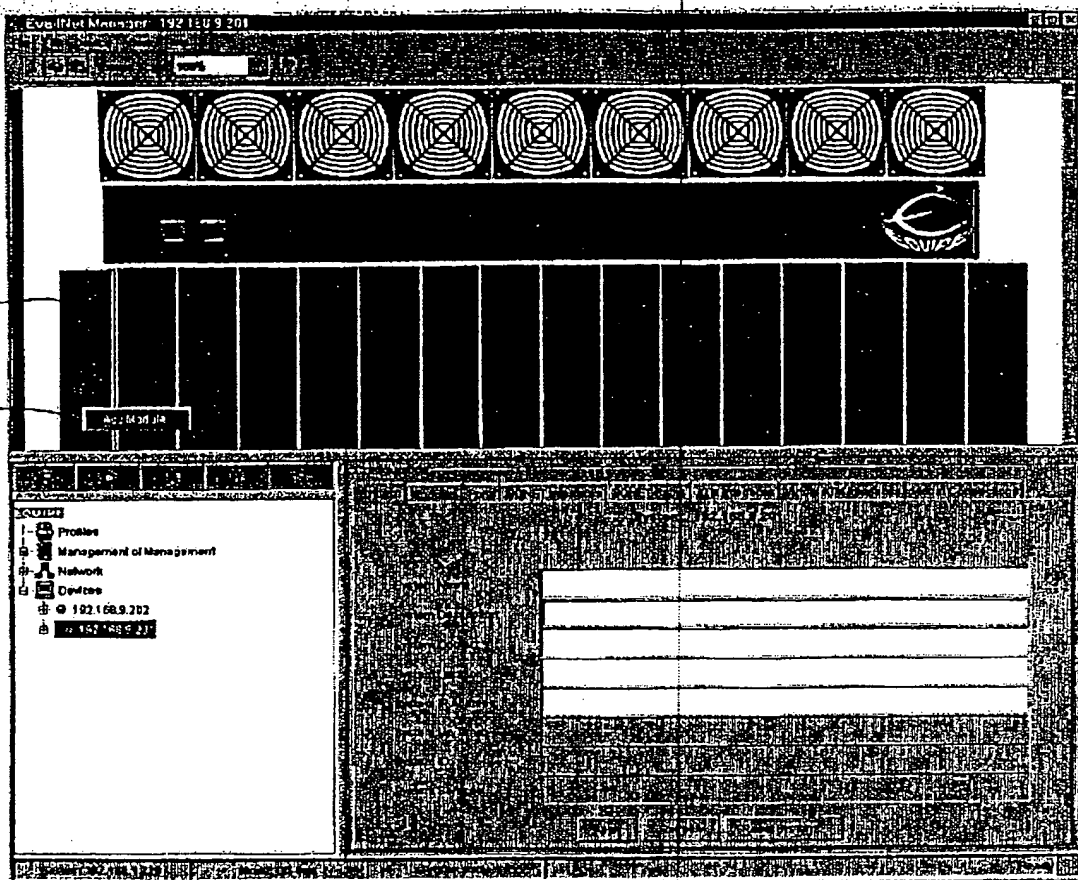


Fig. 6i



Fig. 6j

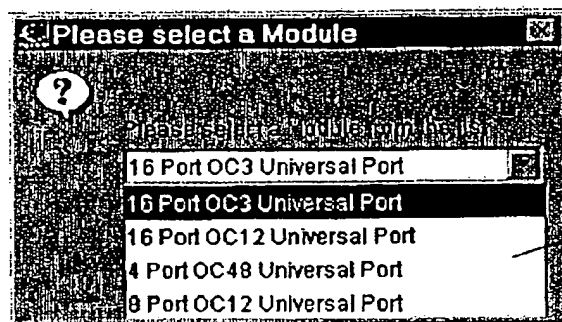
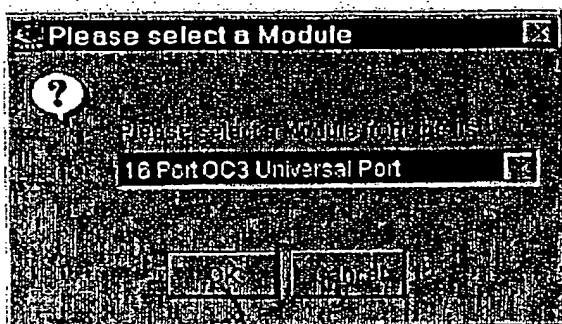


Fig. 6K

895

556i

556h

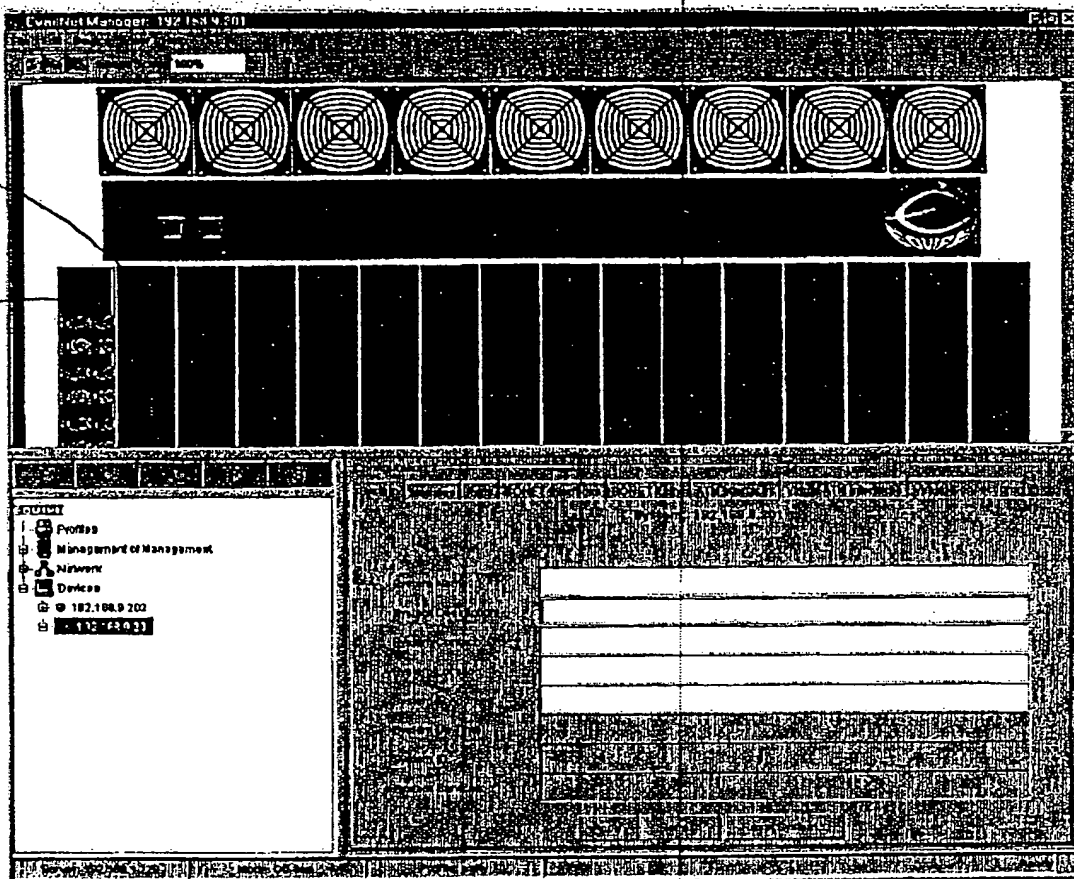


Fig. 6L

895

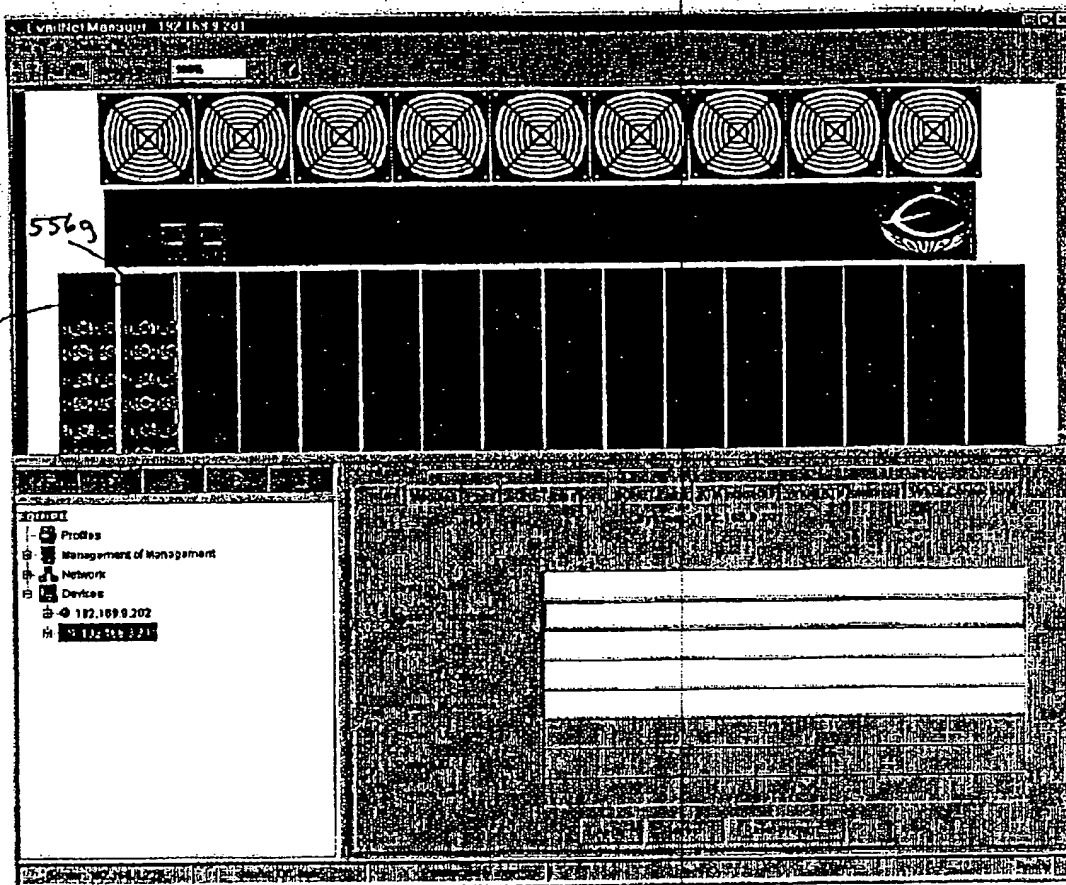


Fig.6m

895

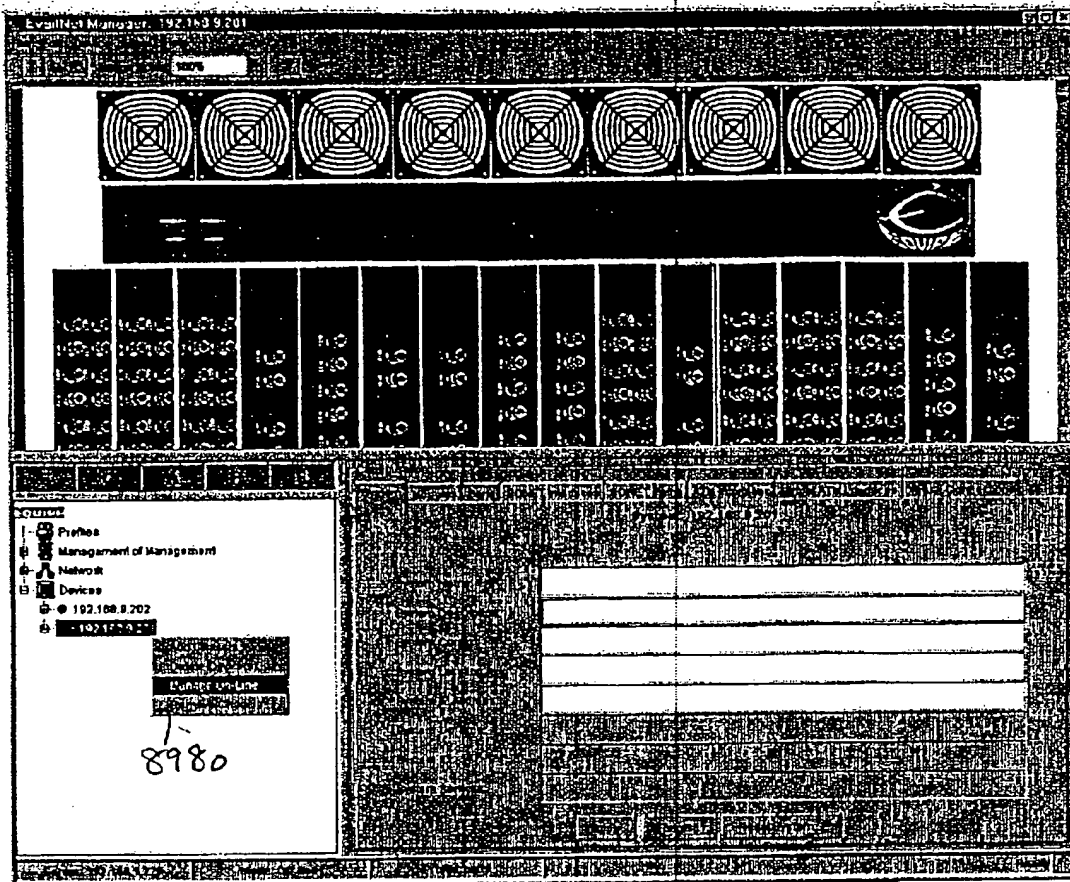


Fig. 6n

895

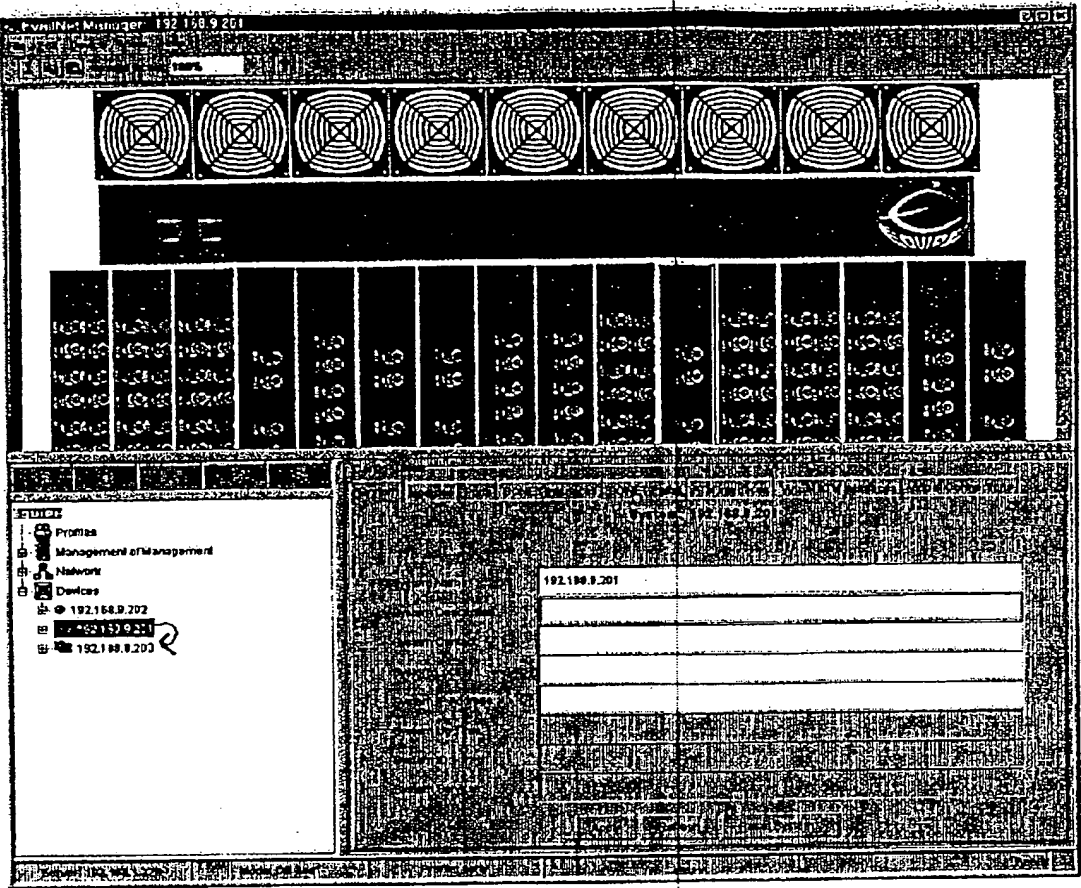


Fig.60

895

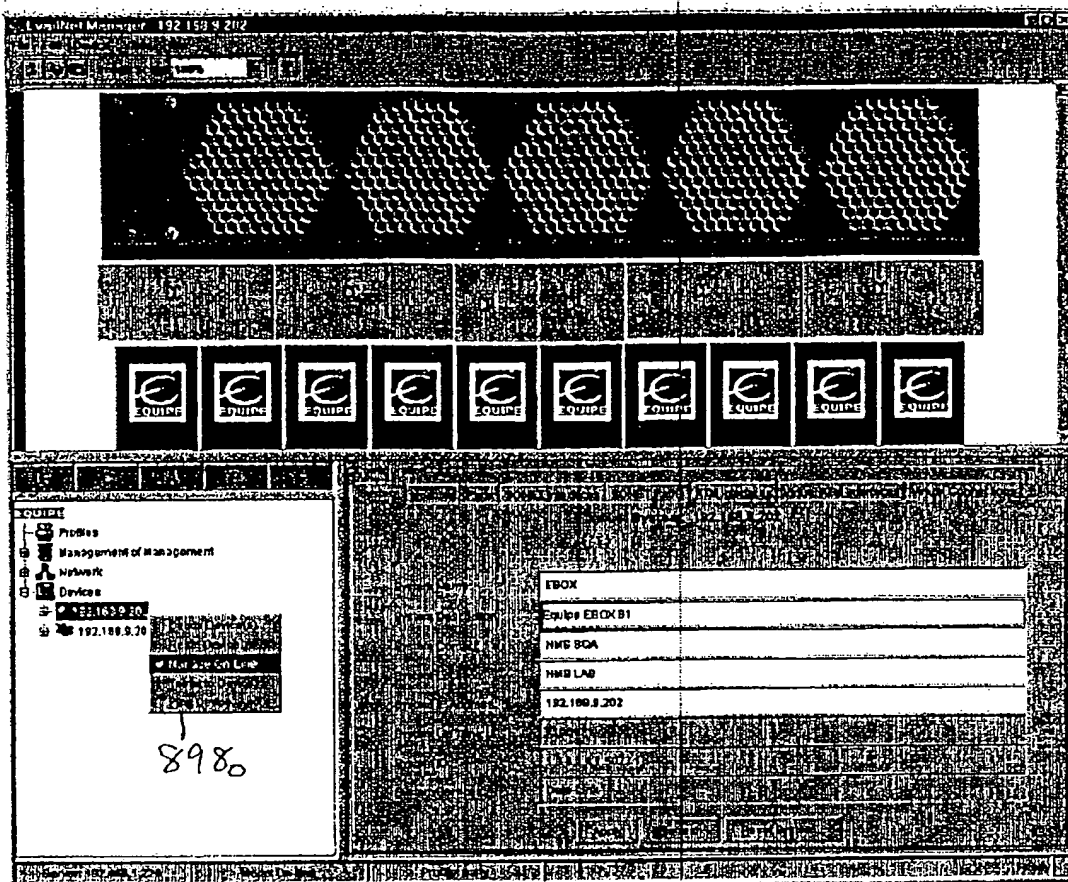


Fig. 6p

895

896

899a  
899b  
899c  
899d  
899e

902

898

897

Fig. 7a

—000

Fig. 7b

The first of these is the fact that the
   
 Government has not been able to
   
 secure the necessary funds to
   
 carry out its policy. This is due
   
 to the fact that the Government
   
 has not been able to secure the
   
 necessary funds to carry out its
   
 policy. This is due to the fact
   
 that the Government has not
   
 been able to secure the necessary
   
 funds to carry out its policy.



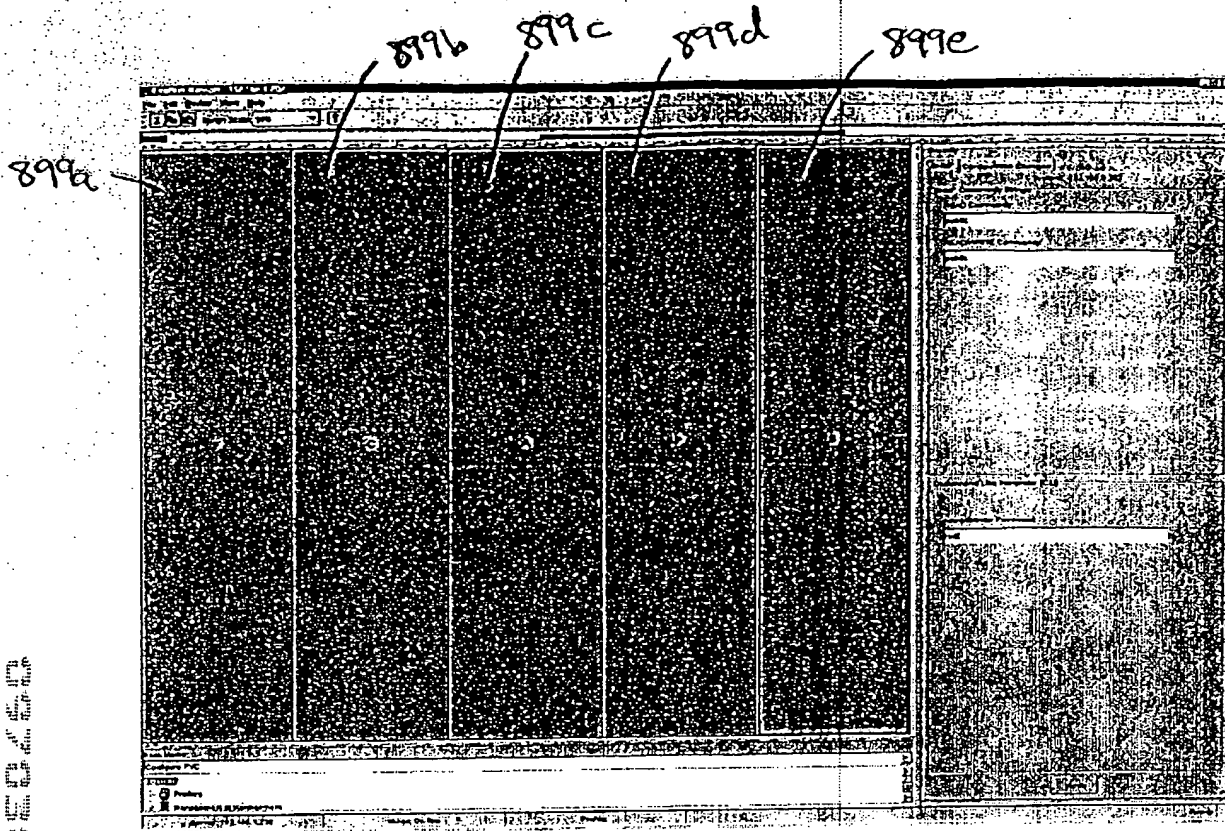


Fig. 7c

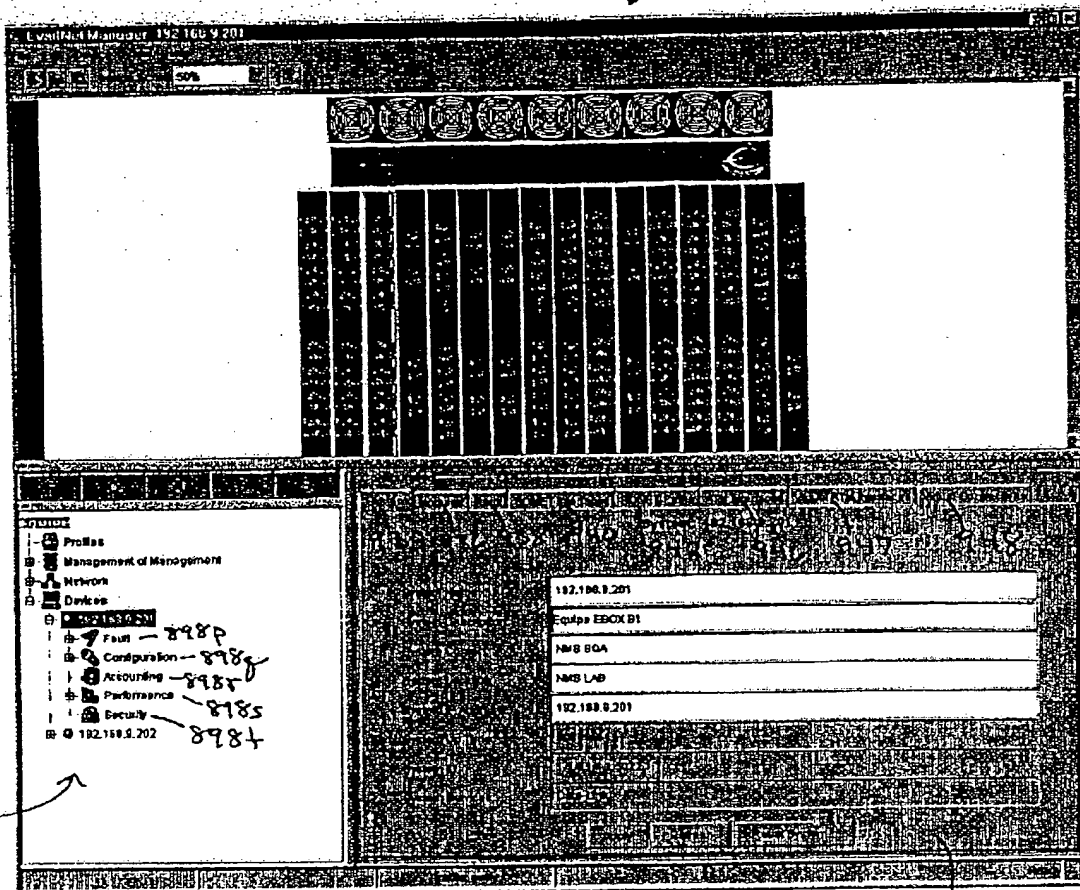


Fig. 7d

895

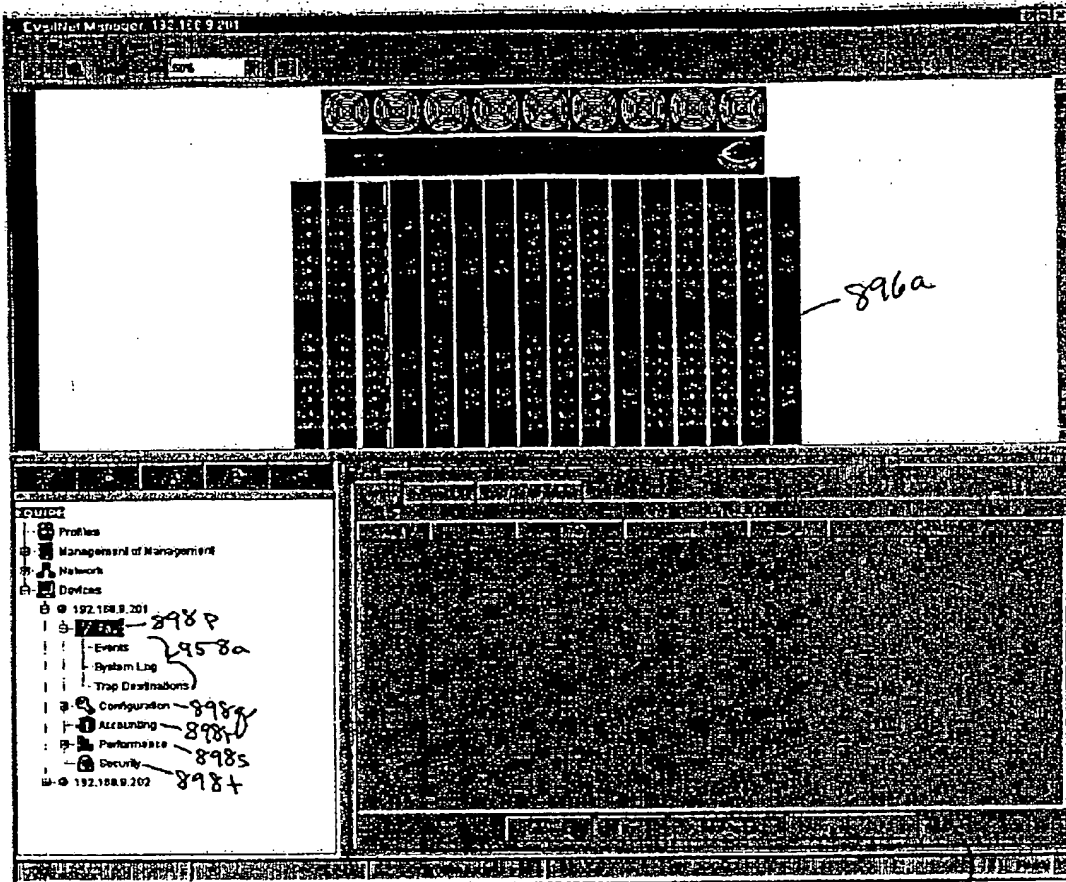
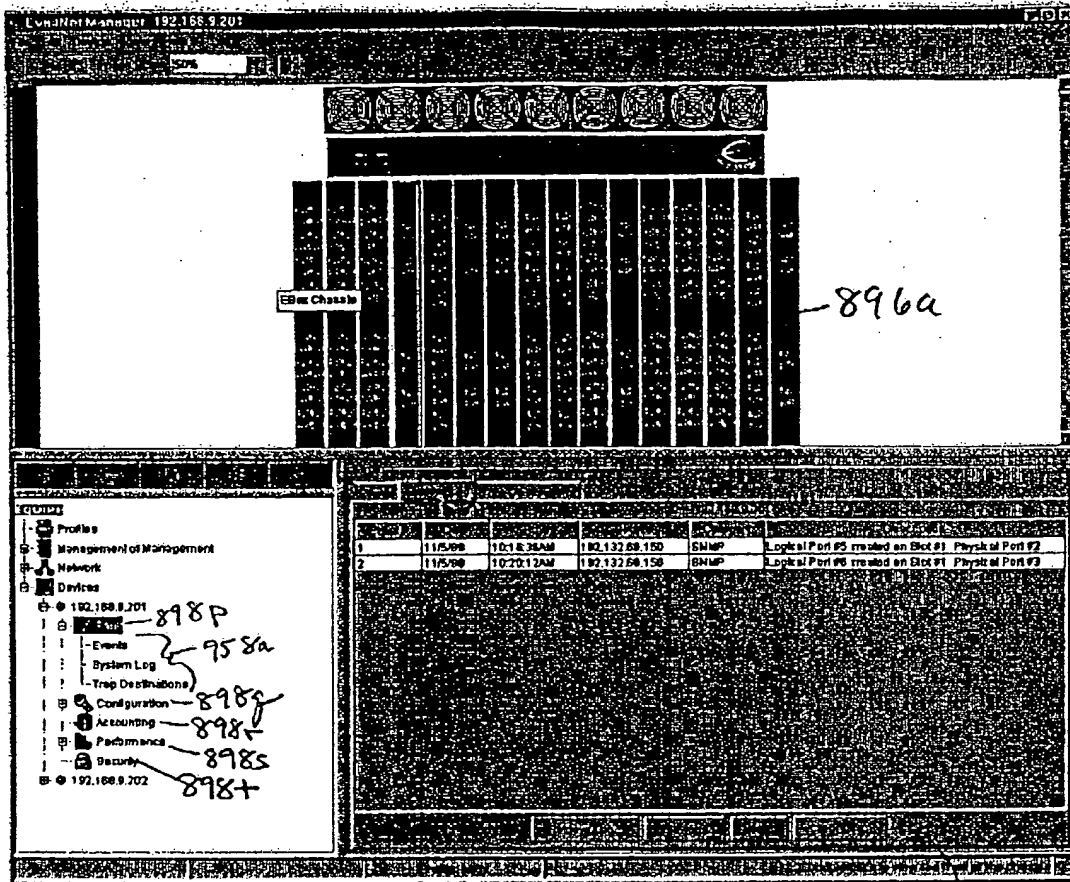


Fig. 7e



897

Fig. 74

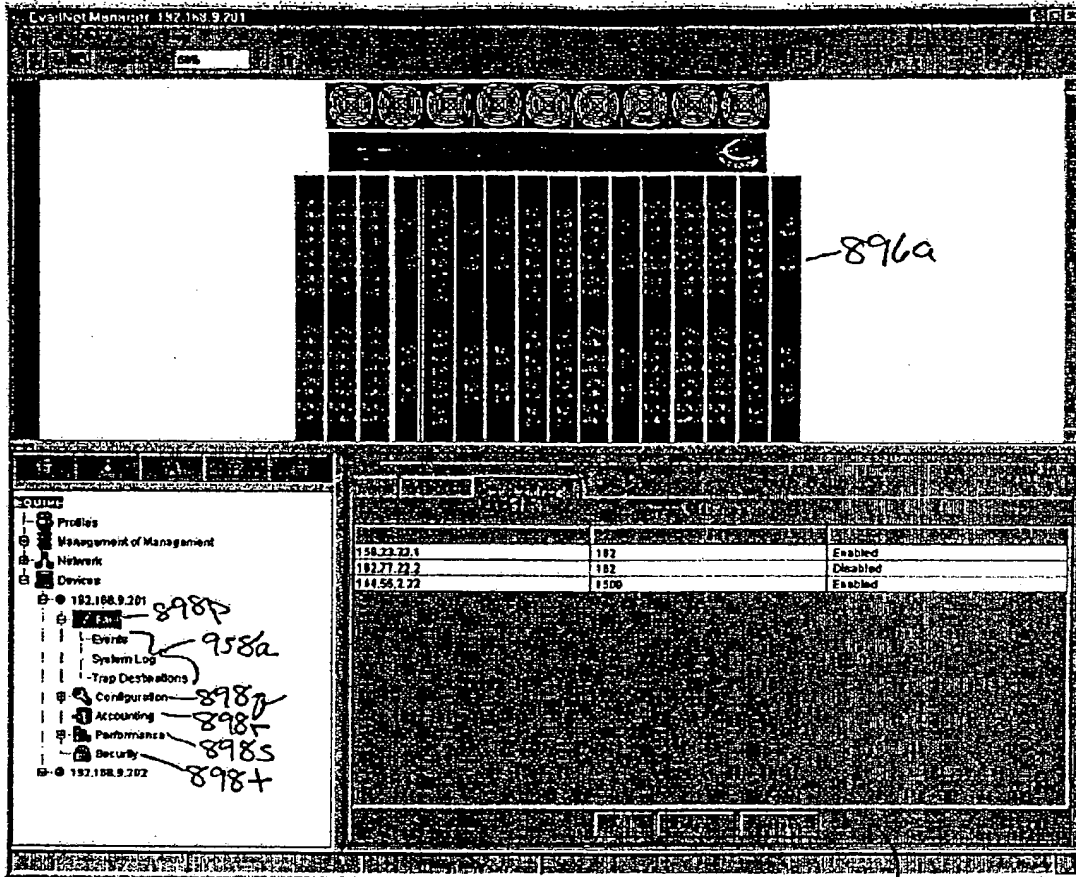


Fig. 7g

895

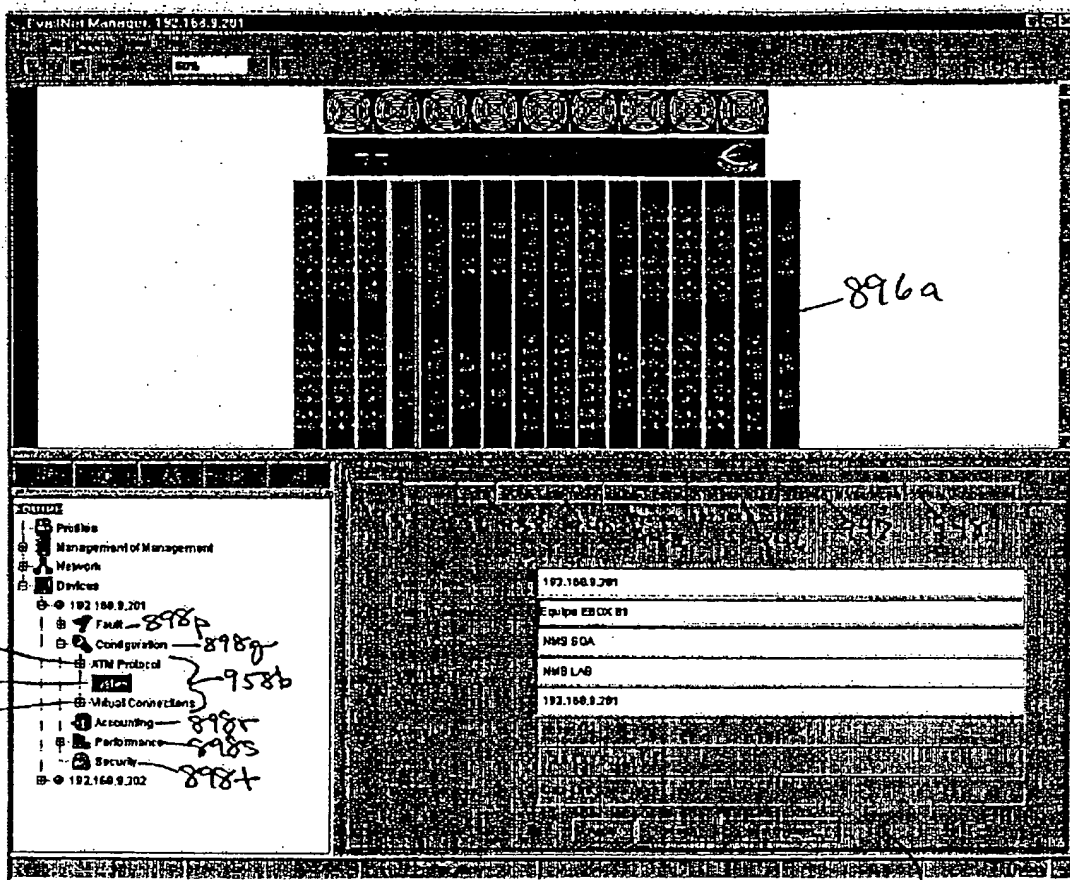


Fig. 7h

895

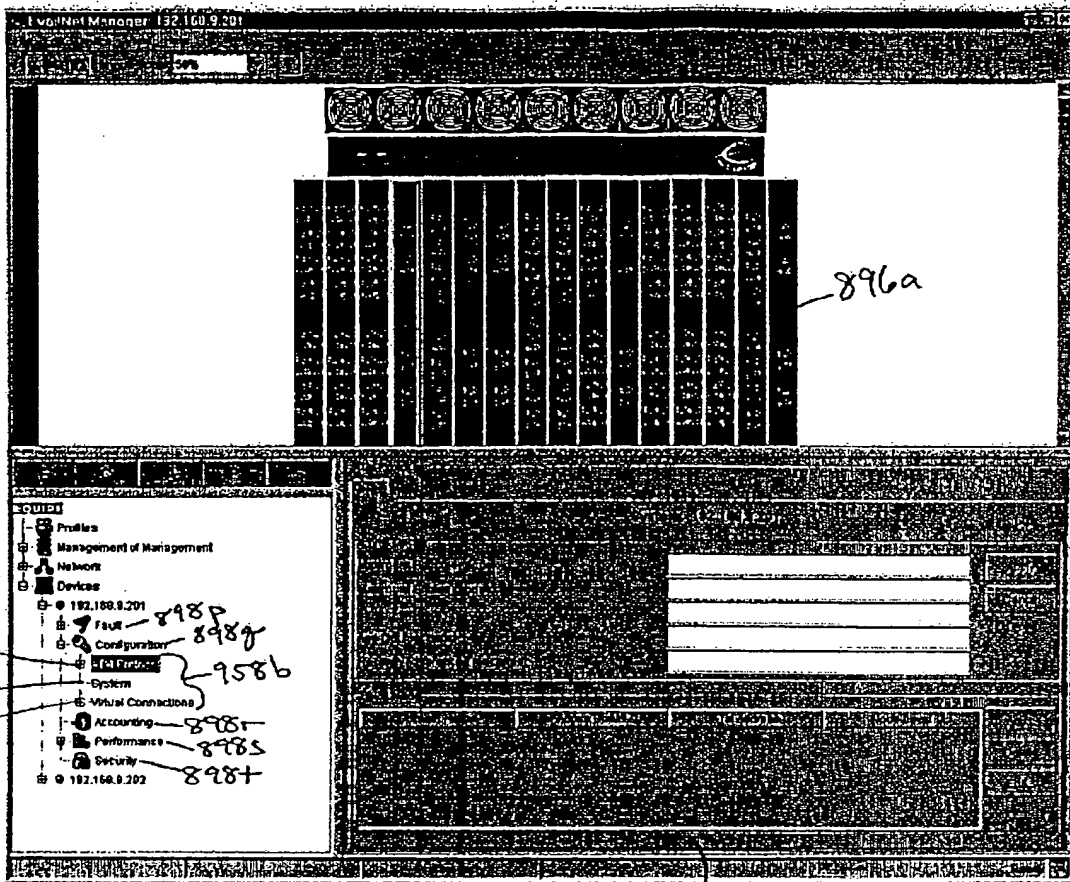


Fig. 7i

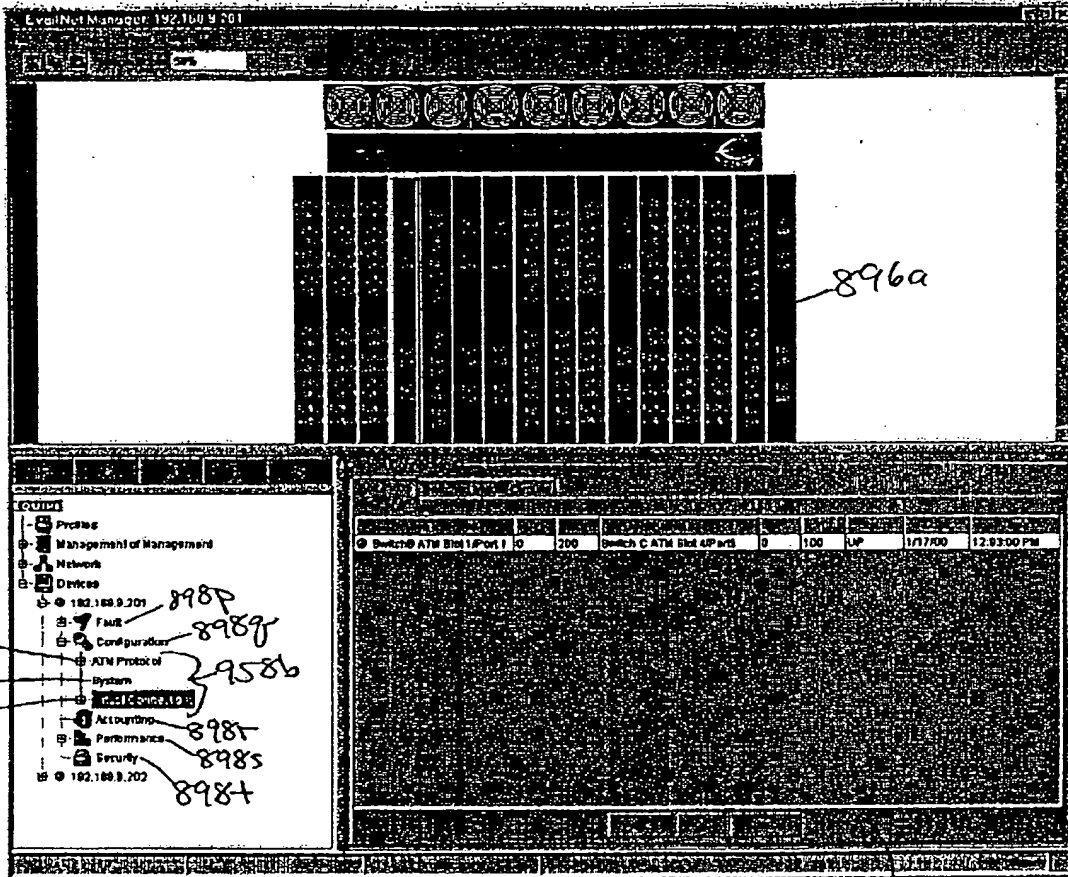


Fig. 7j



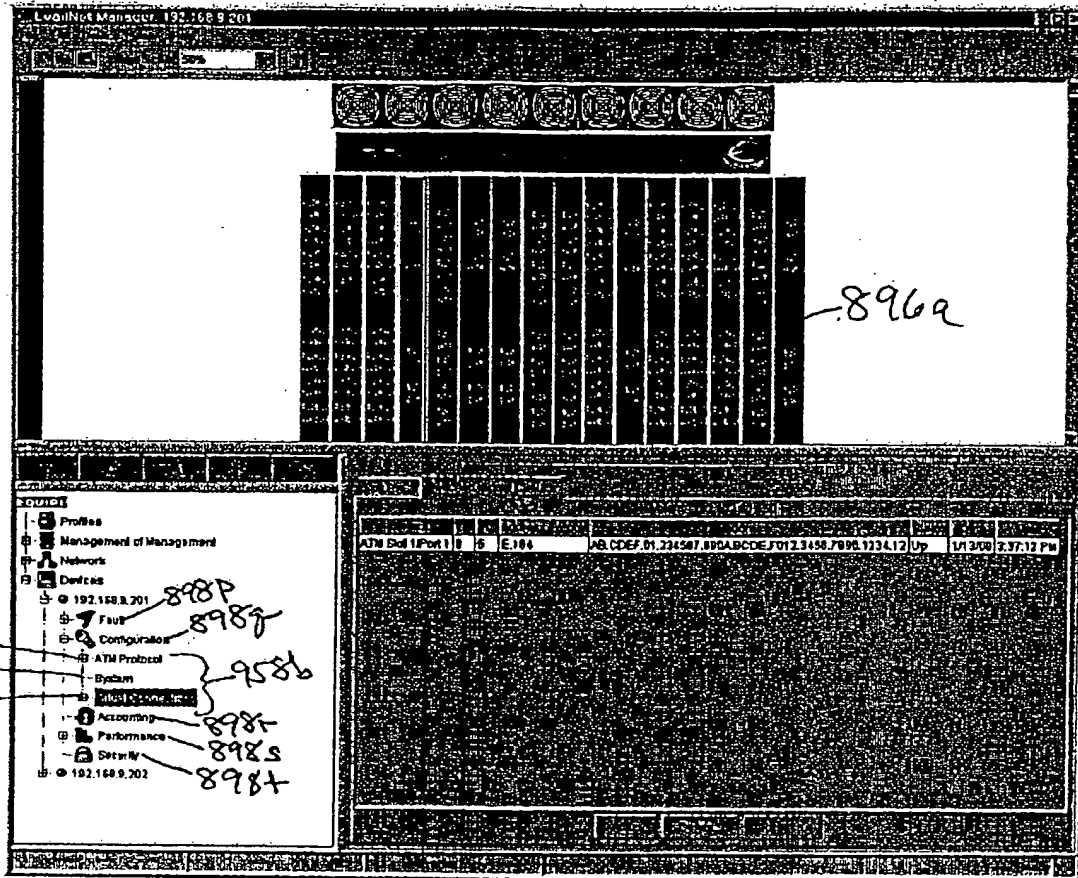


Fig. 7K

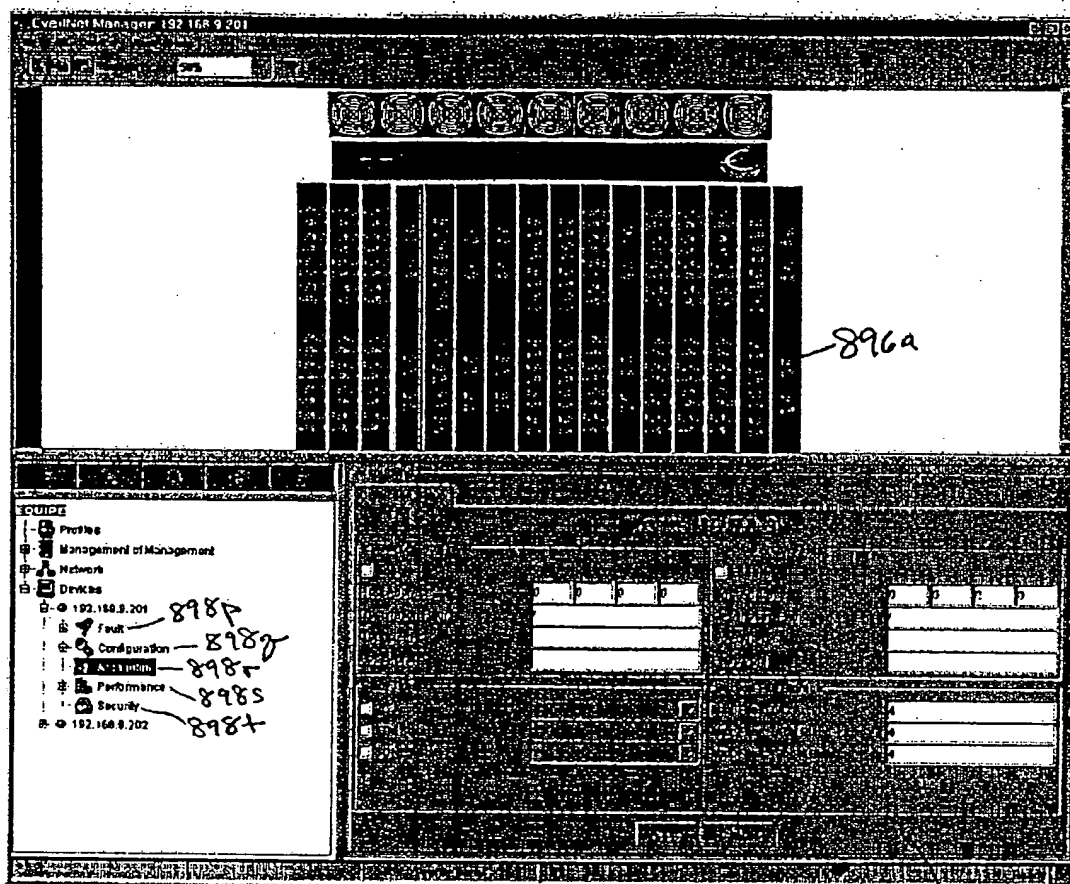


Fig. 7L

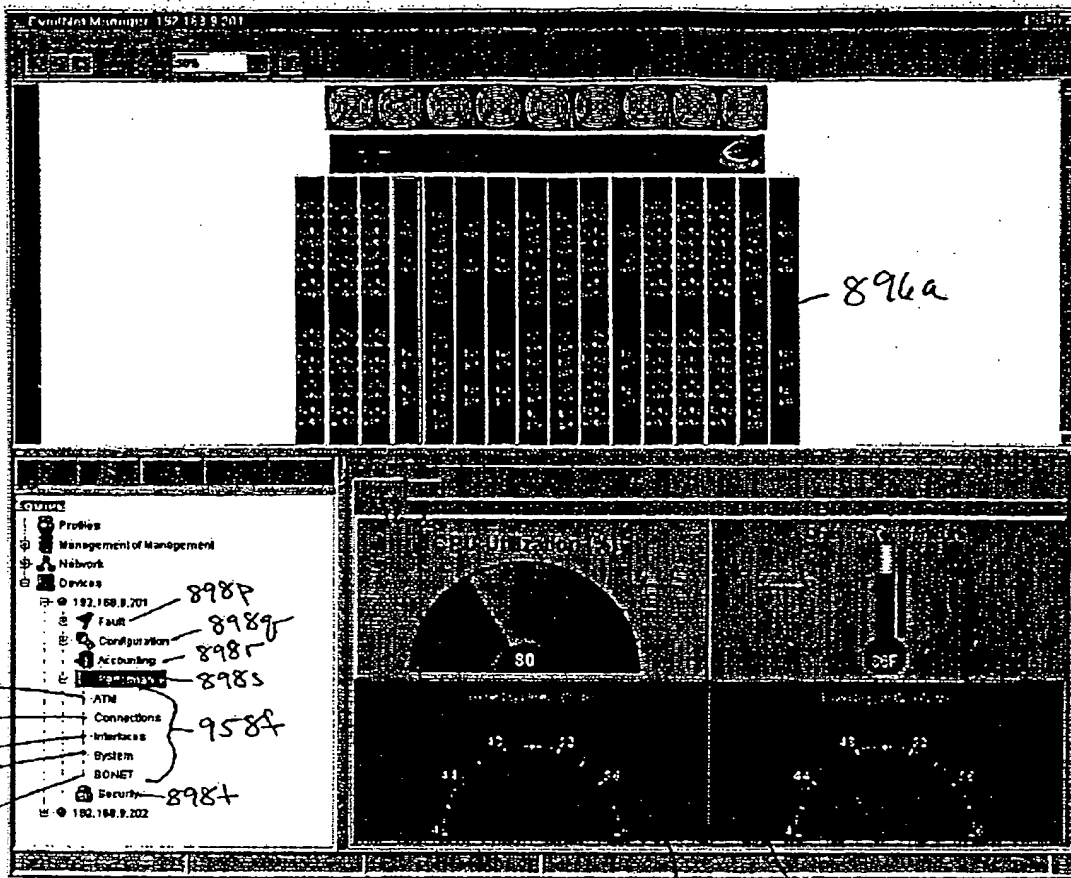


Fig. 7m

895

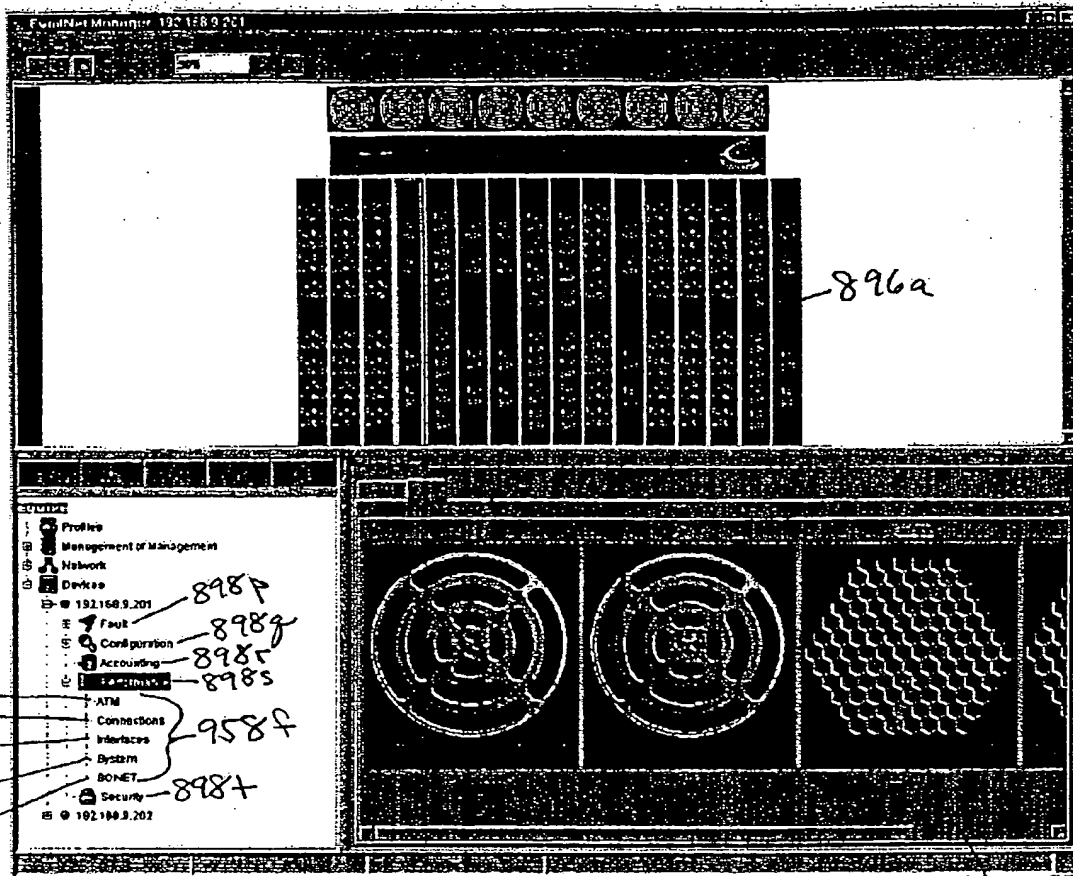


Fig. 7n

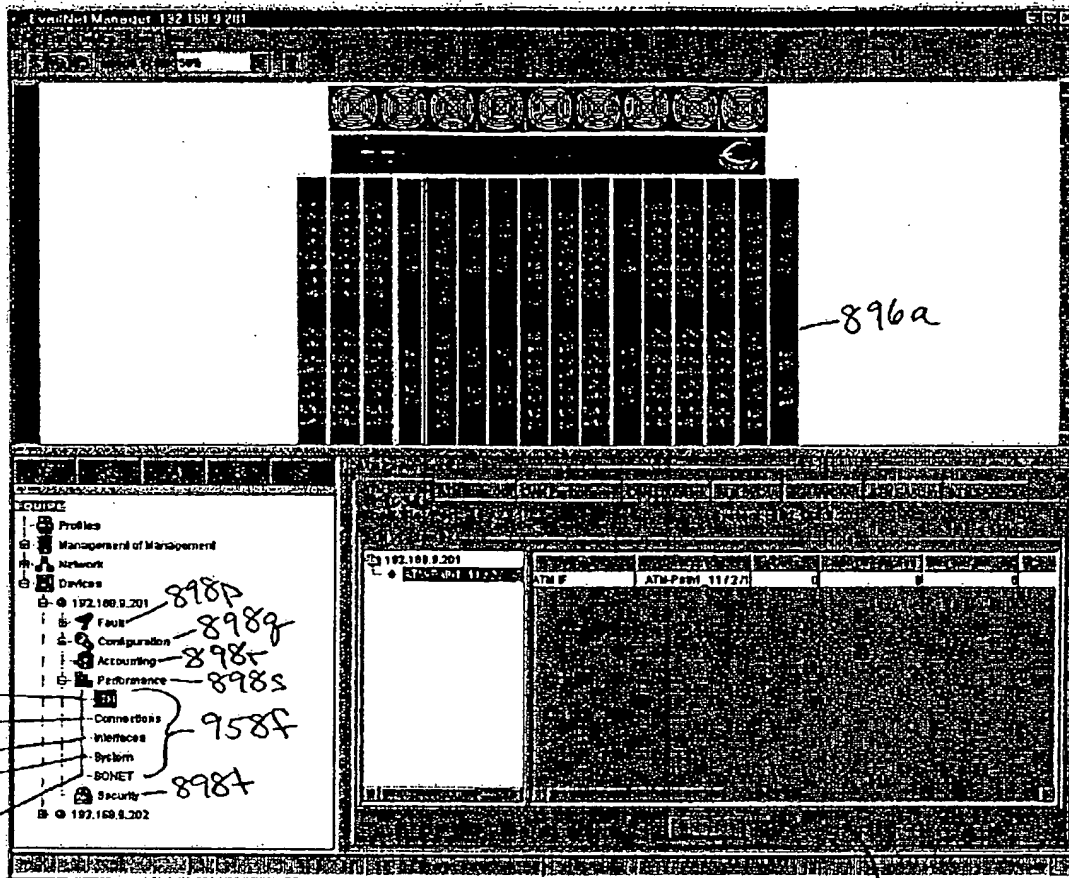


Fig. 70

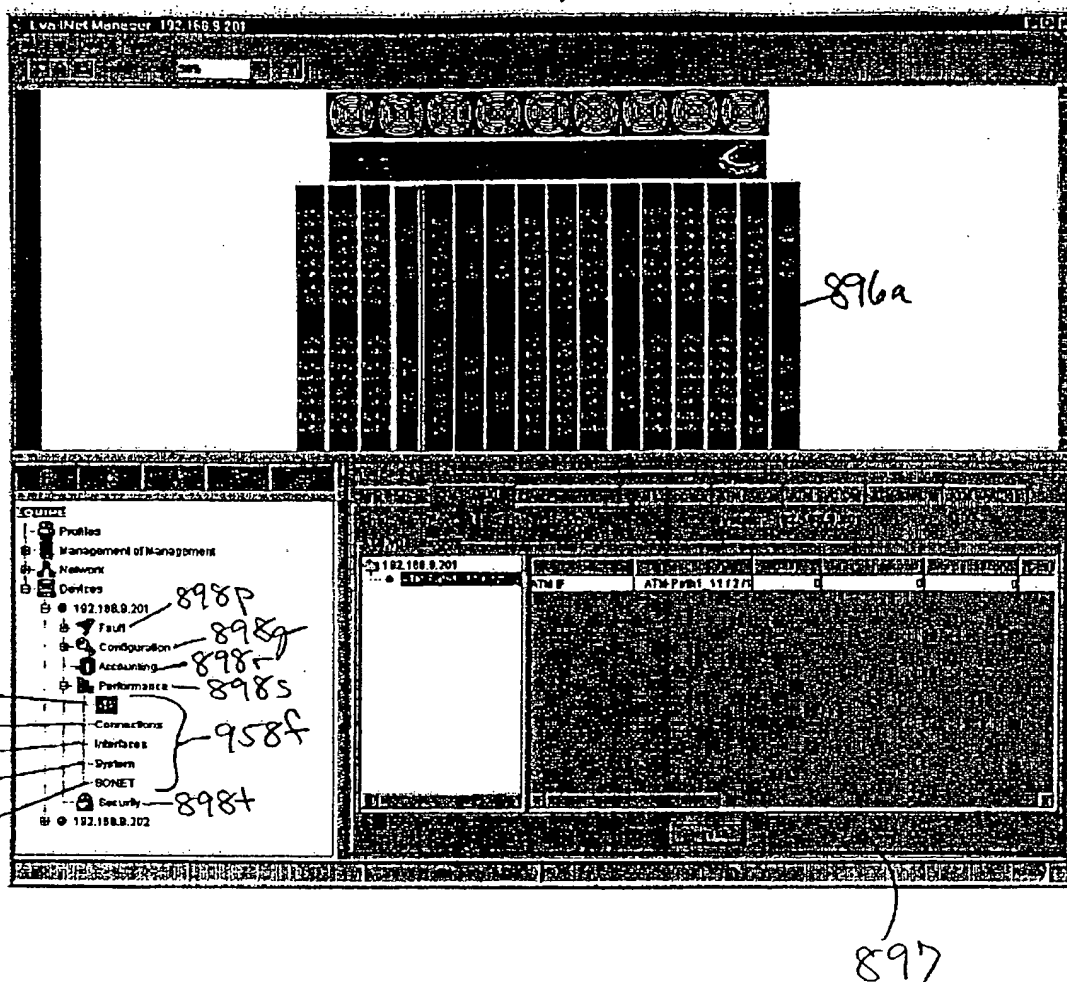


Fig. 7p

895

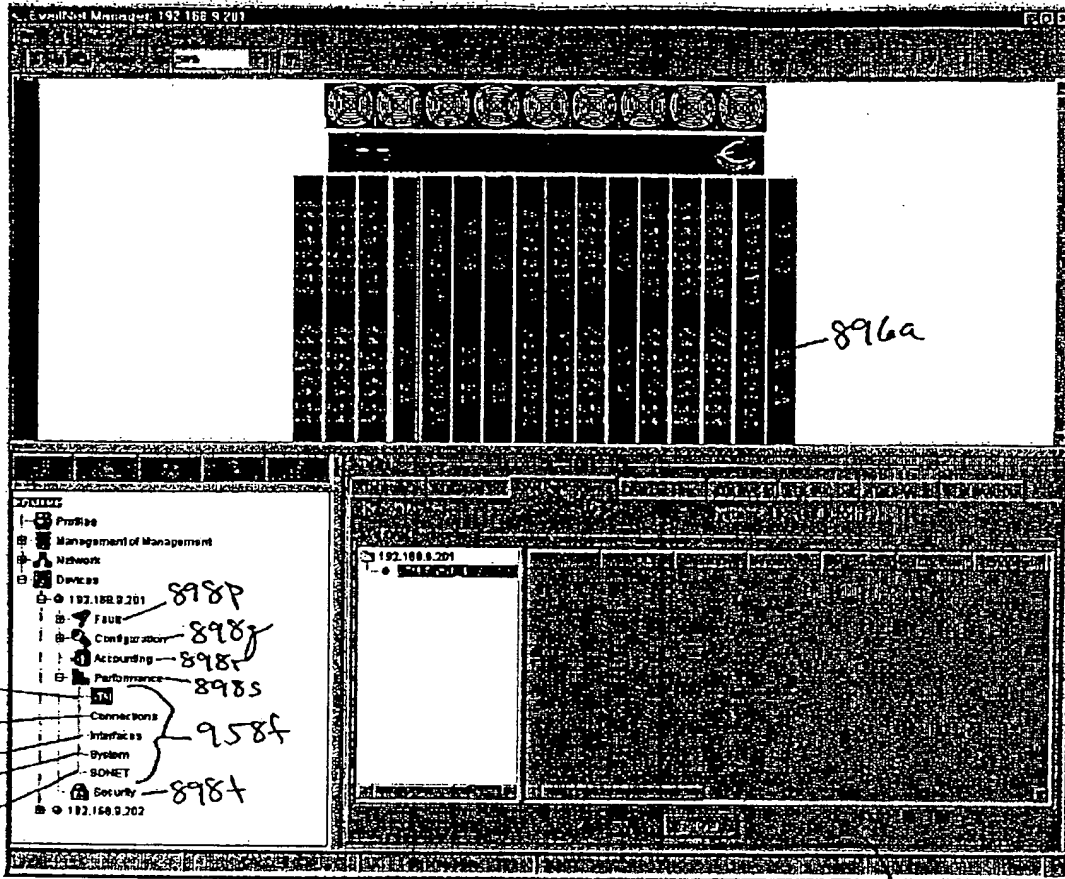


Fig. 7g

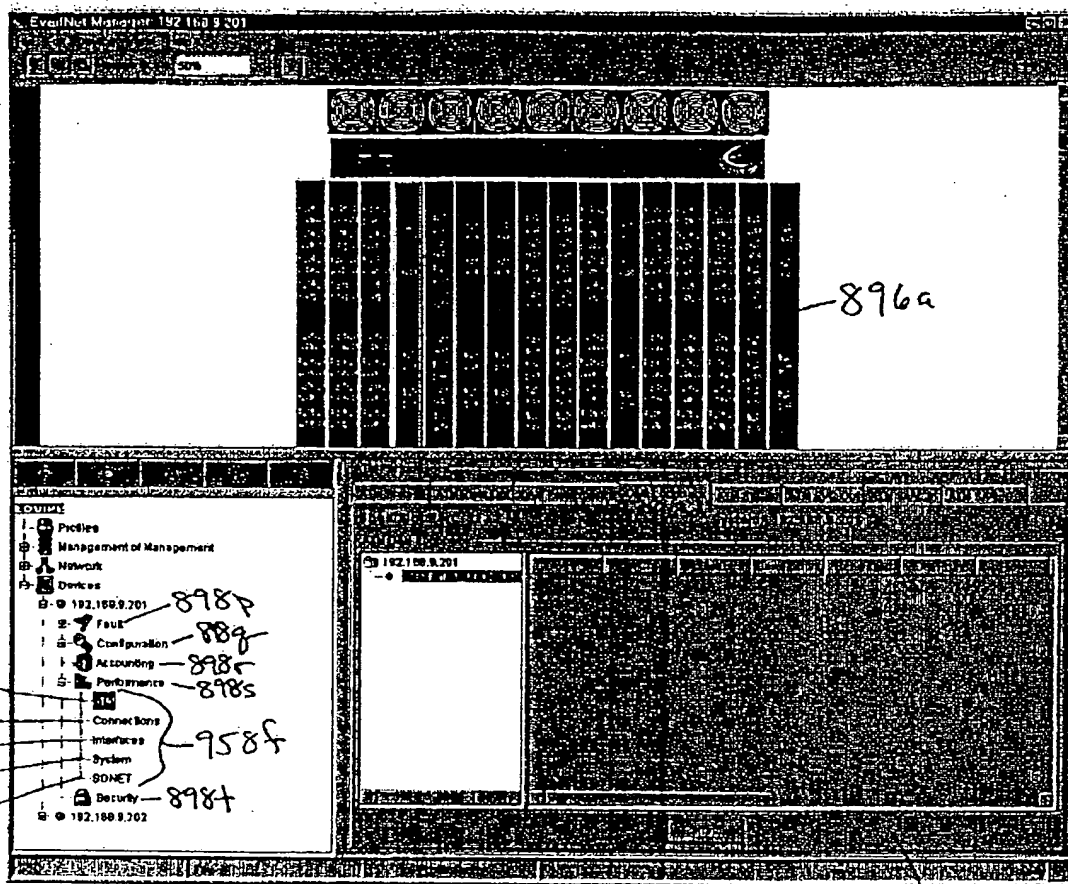
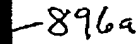


Fig. 7



↙ 895



897

Fig. 7s

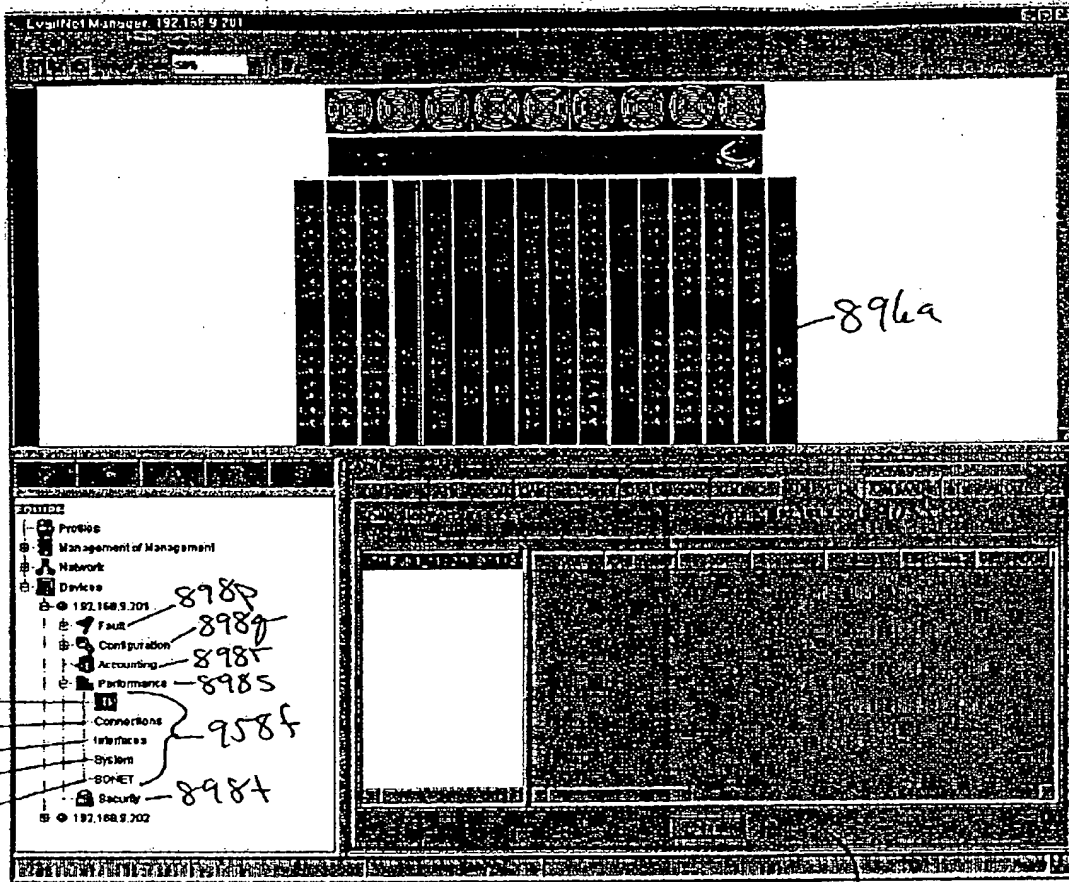
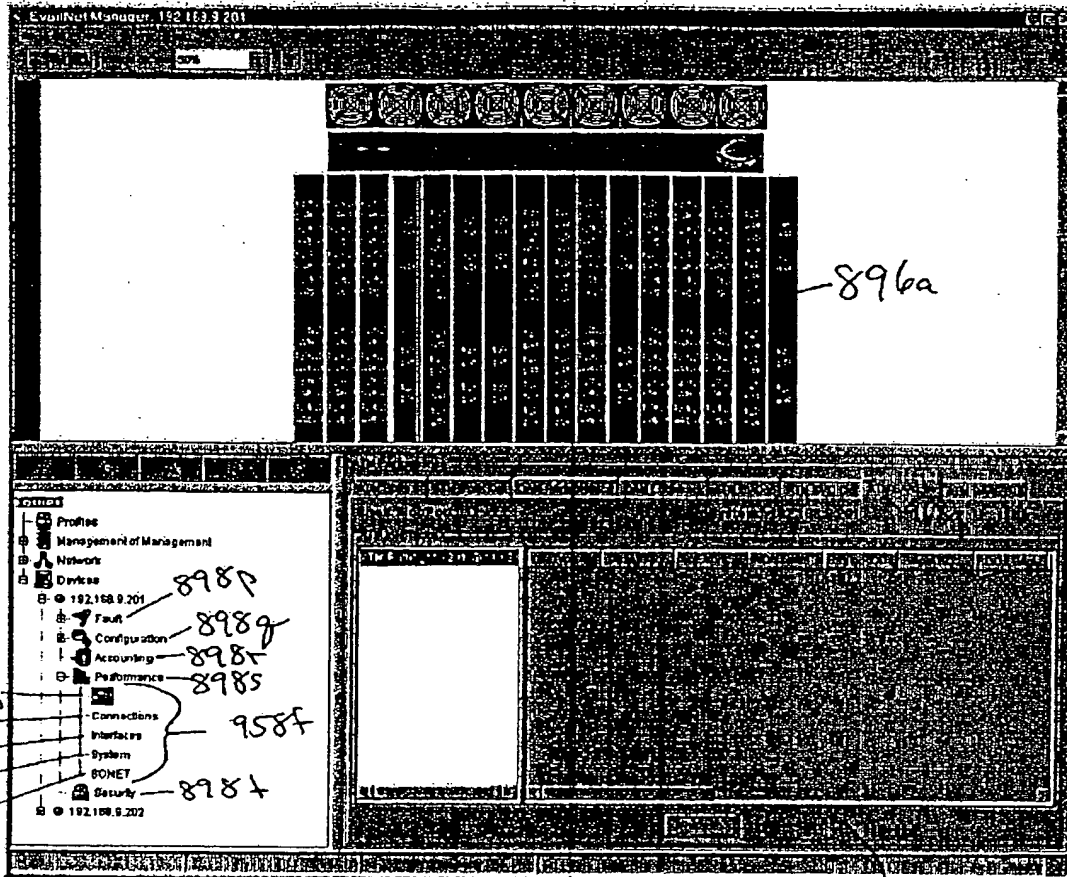


Fig. 7+

895



897

Fig. 7u

895

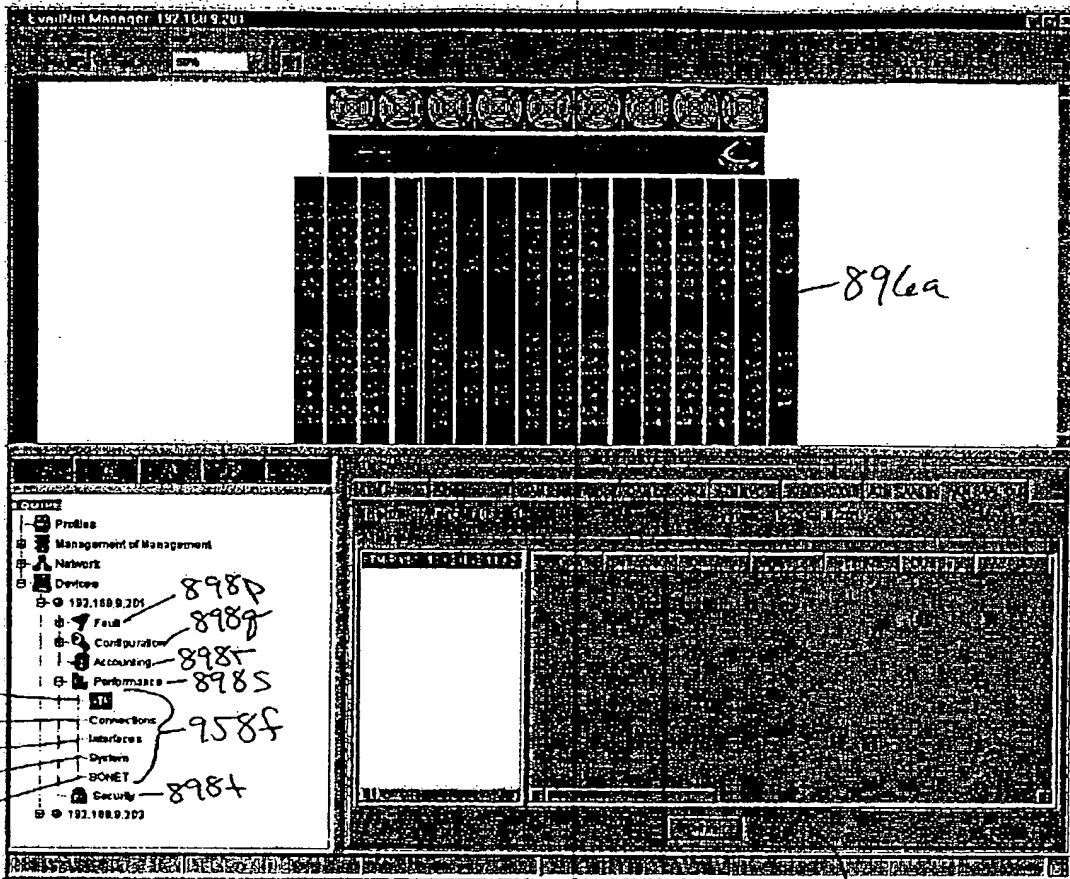


Fig. 7v

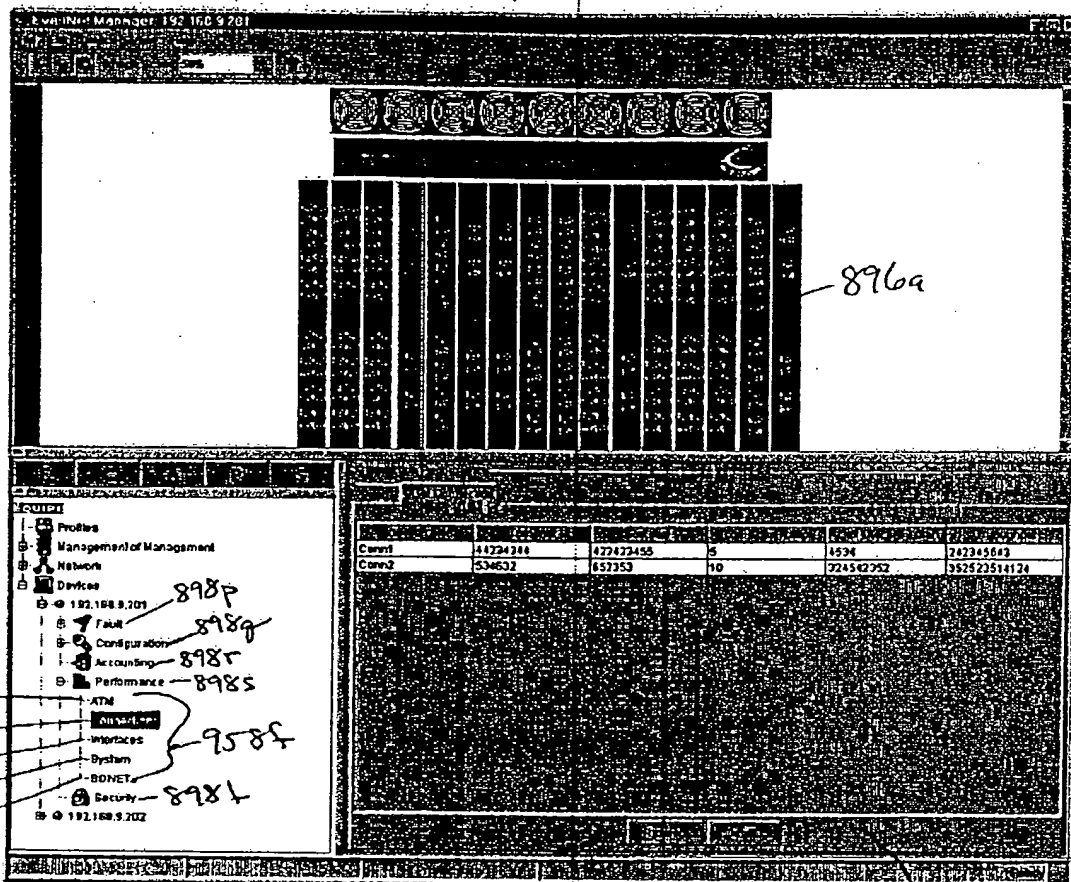
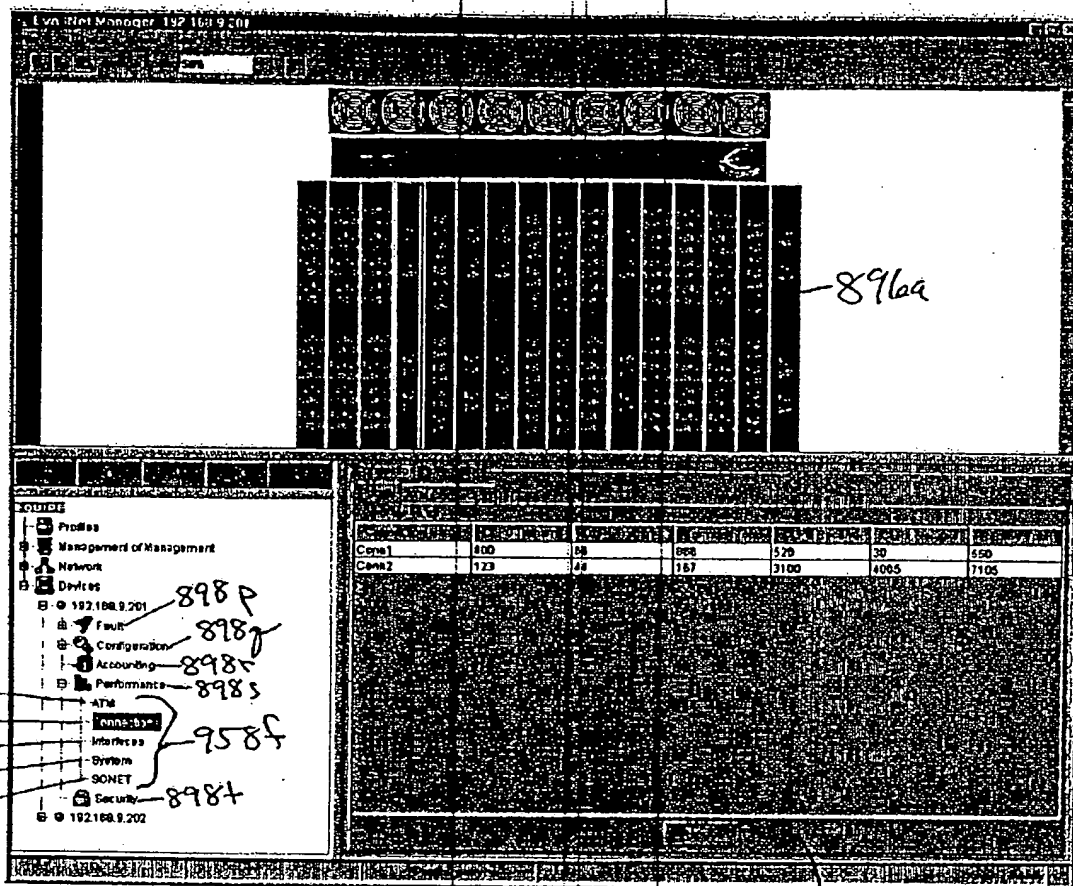


Fig. 7w

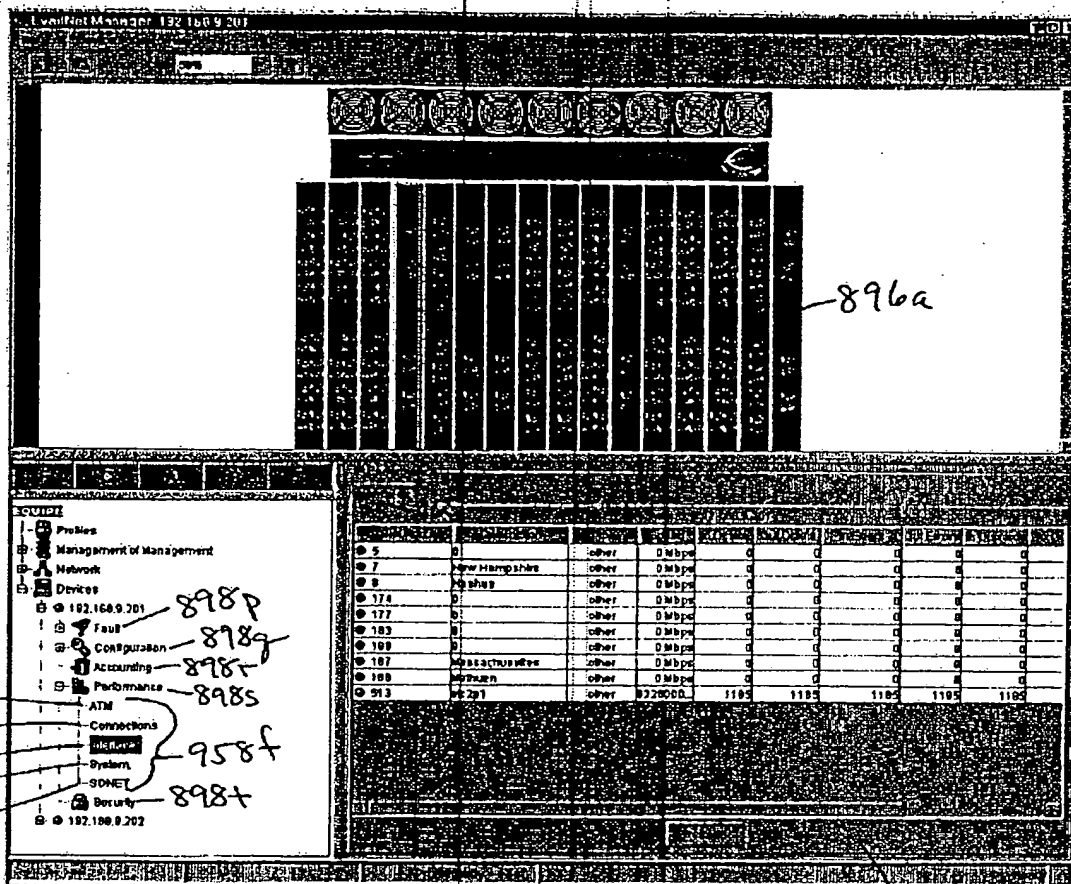
895



897

Fig. 7x

895



897

Fig. 7y

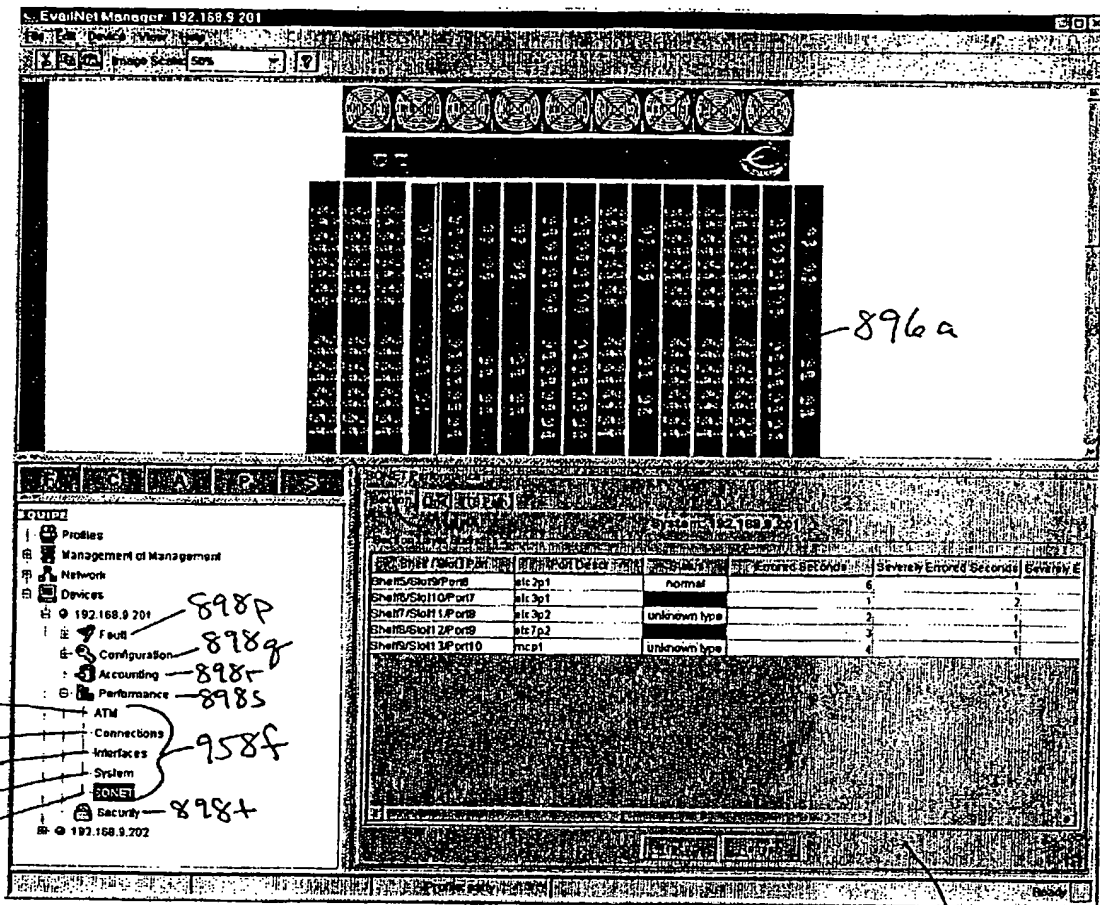
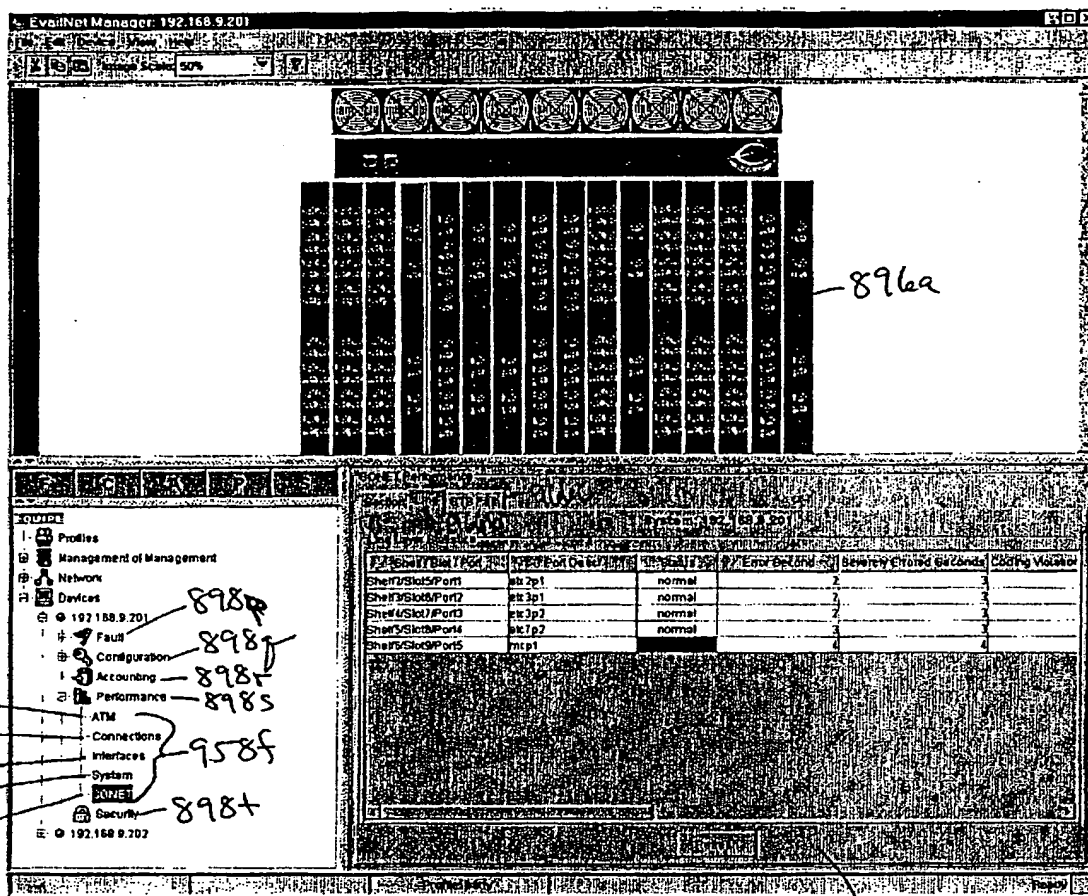


Fig. 8a



✓ 895



897

Fig. 86

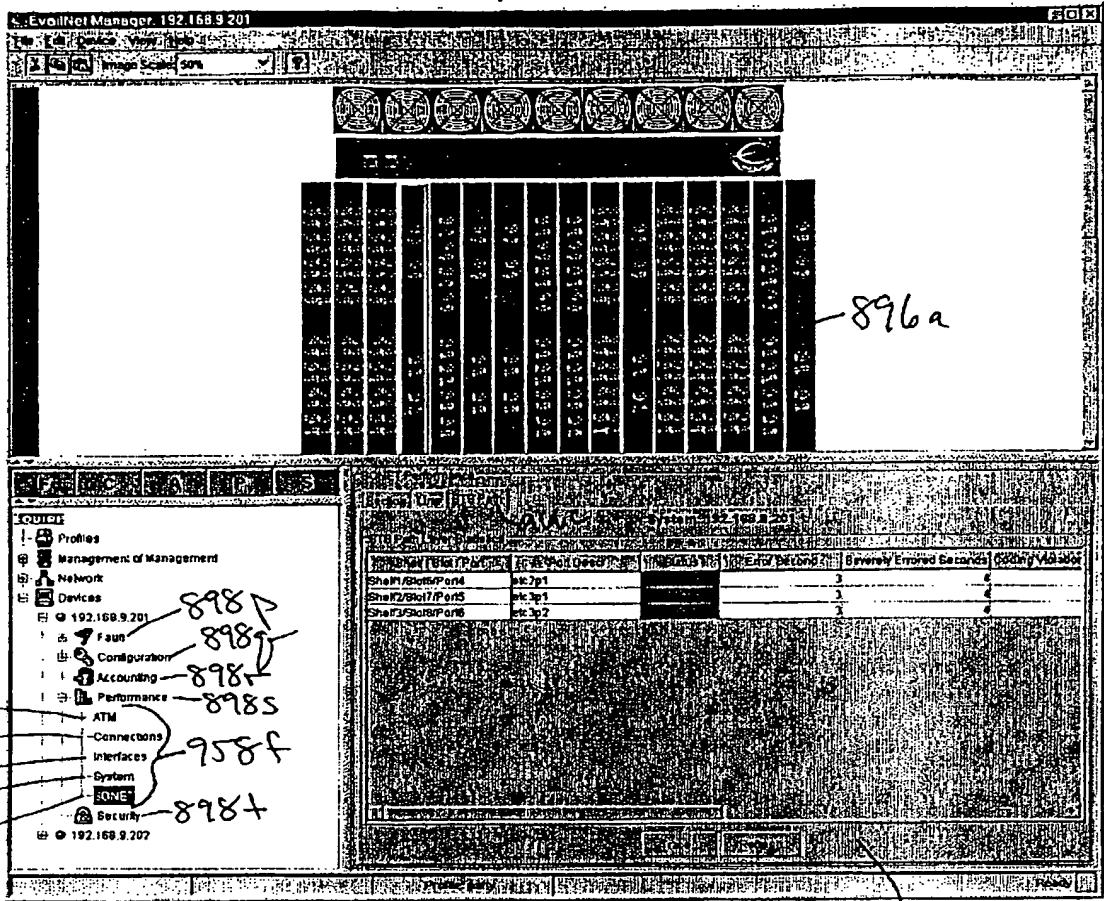


Fig. 8c

895

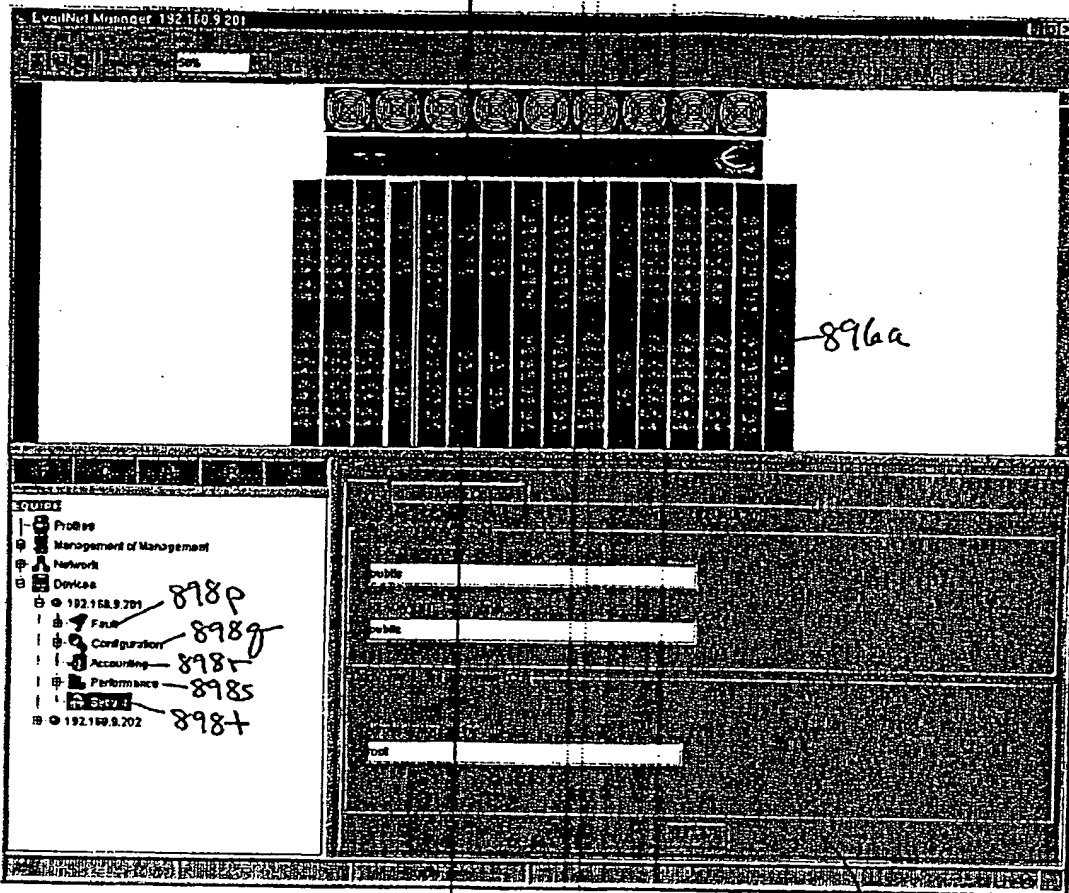


Fig. 8d

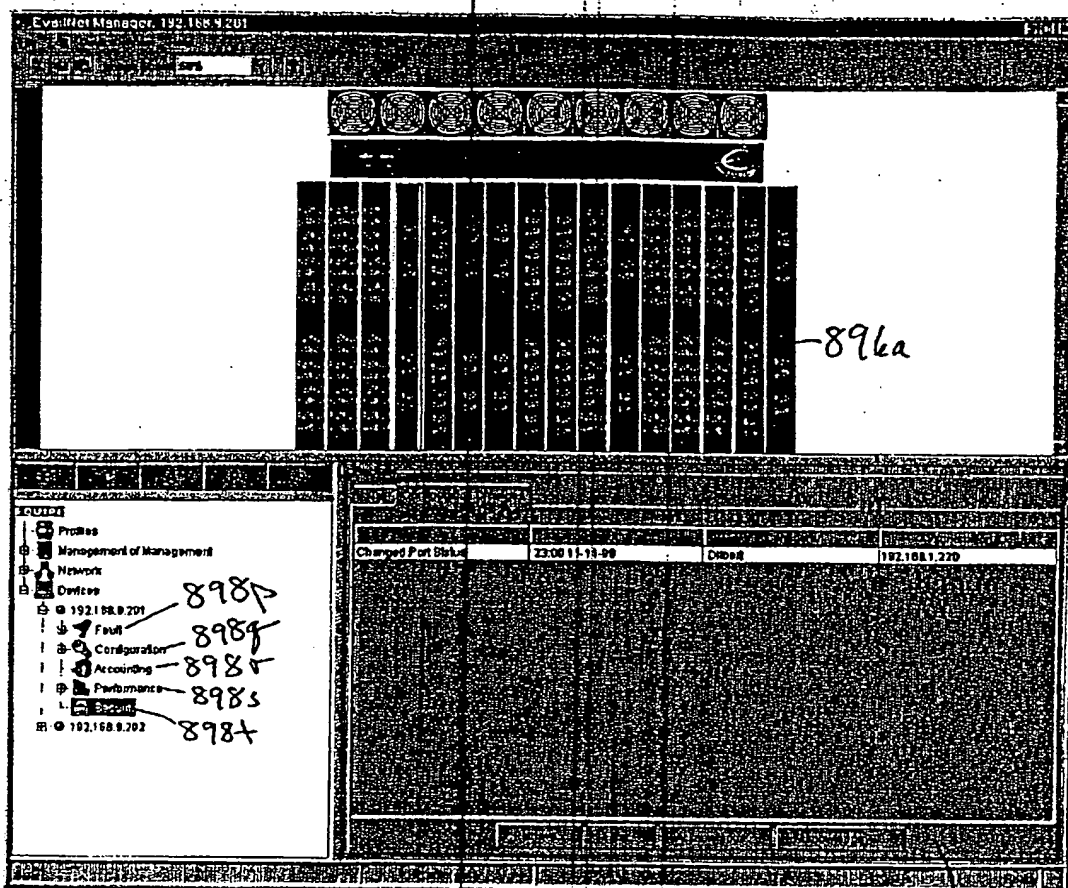


Fig. 8e

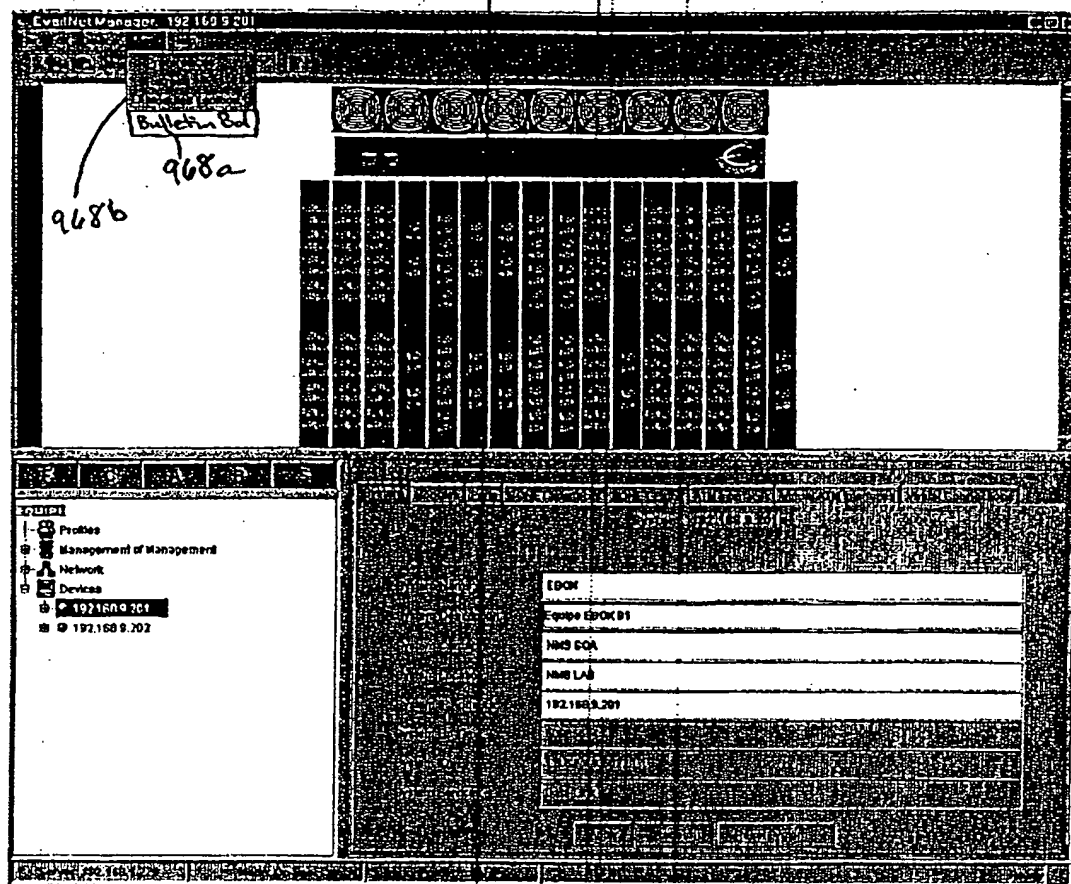
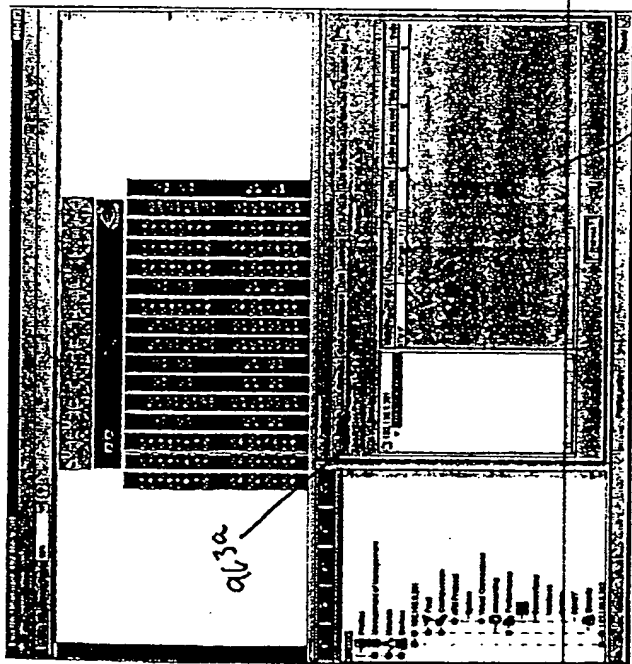


Fig. 9a

970a

971c

885

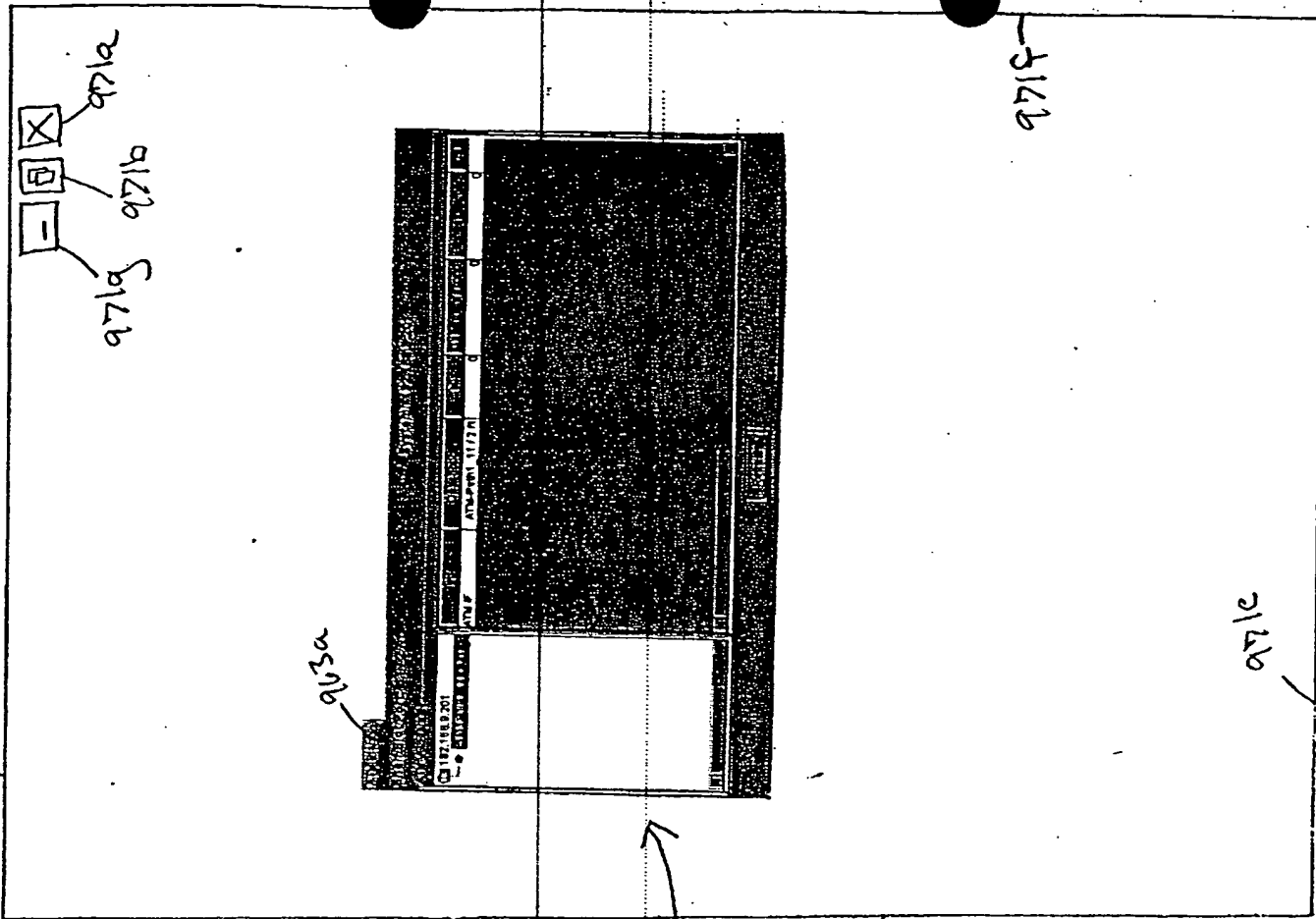


963a

969a

971d

Fig. 9b



971g

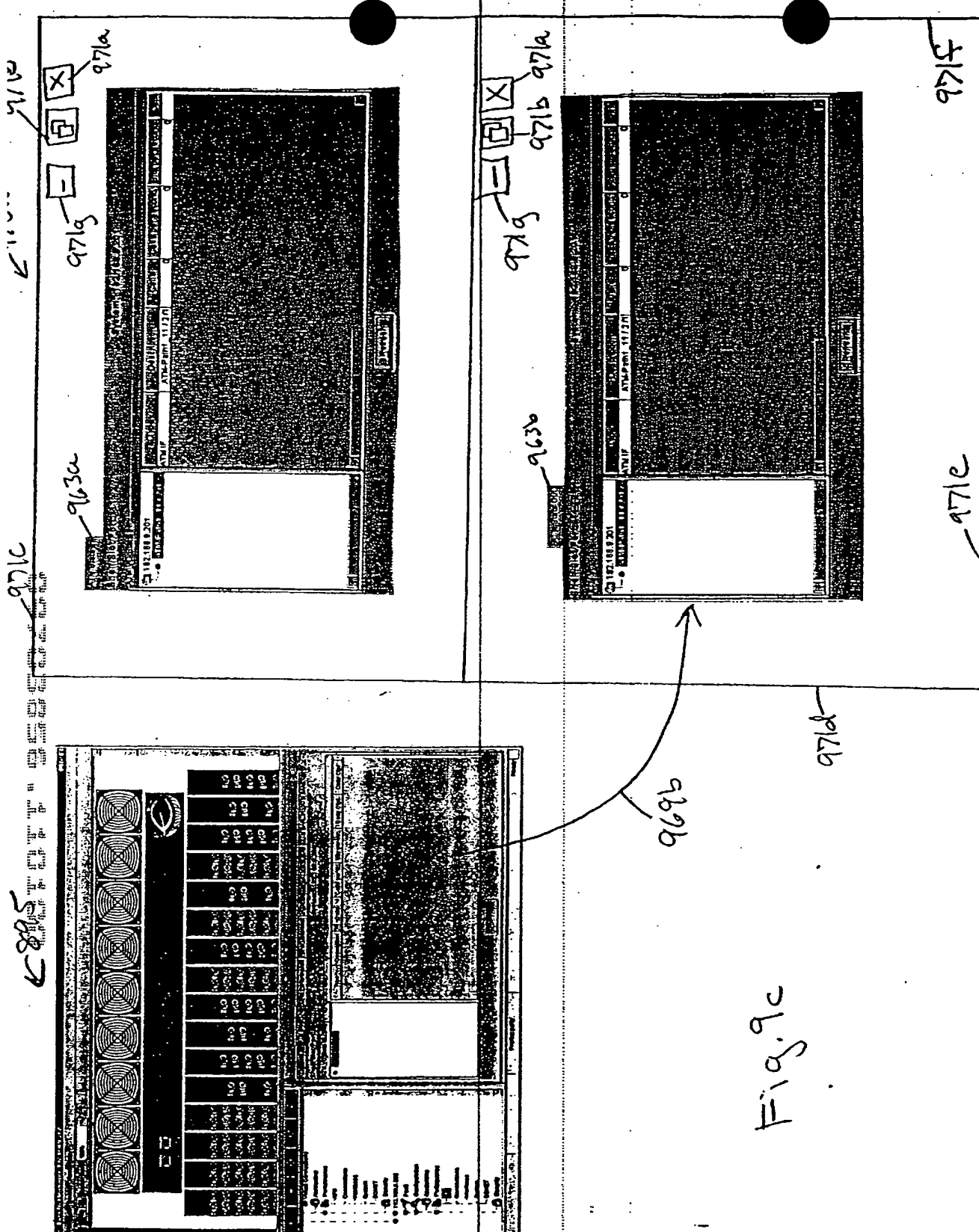
971b

971a

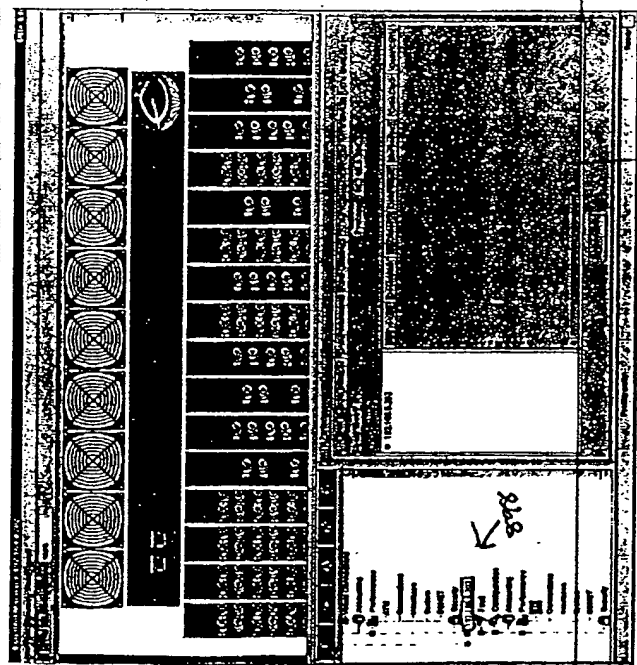
963a

971f

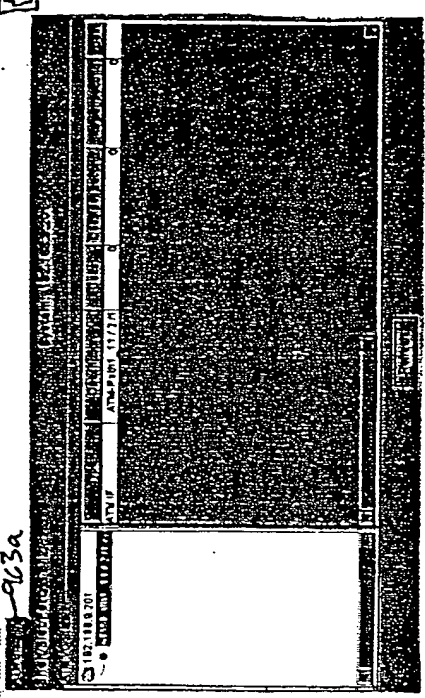
971e



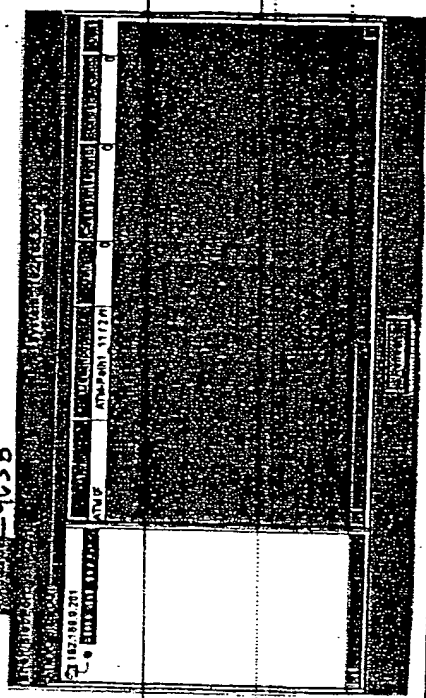
895



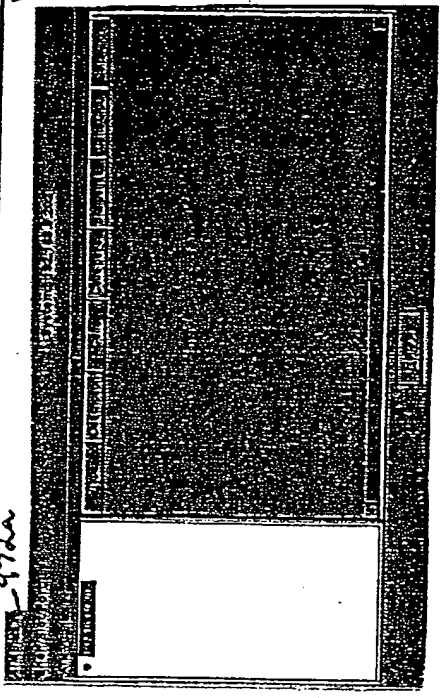
93a



93b

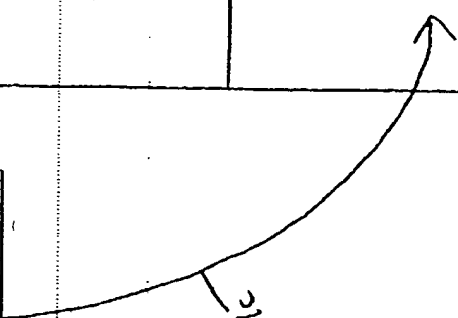


972a



969c

Fig. 9d





← 895

← 895

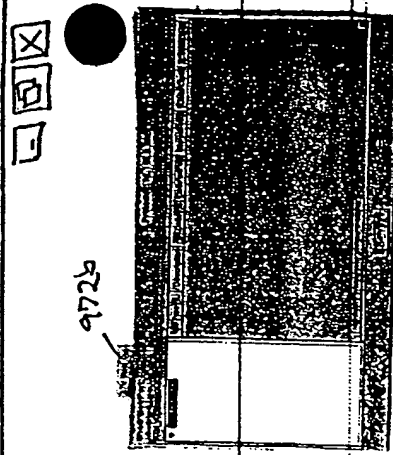
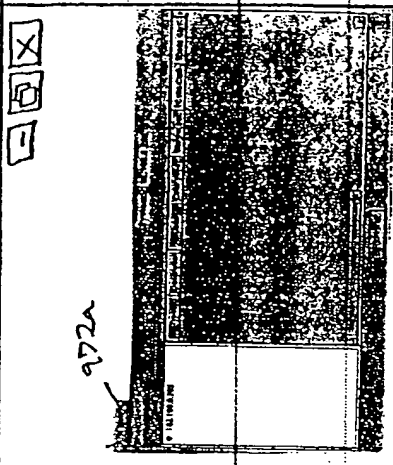
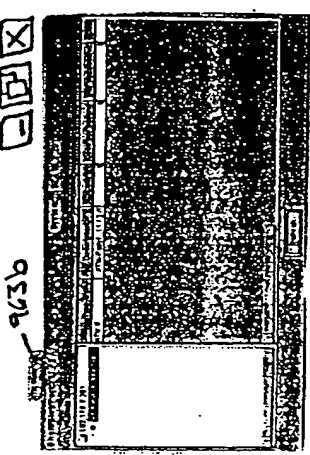
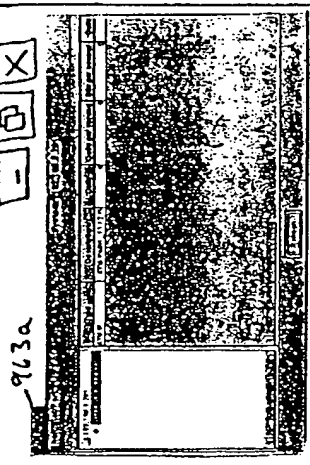
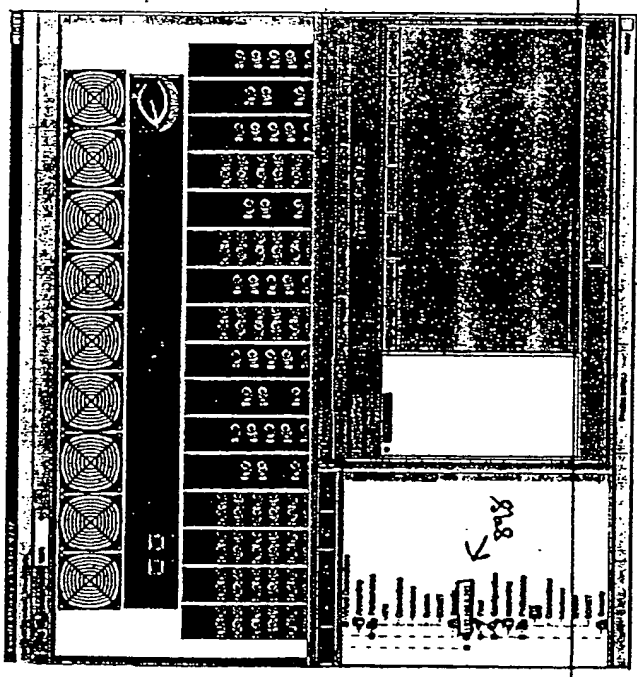


Fig. 9e

969a



970a

970b

970a

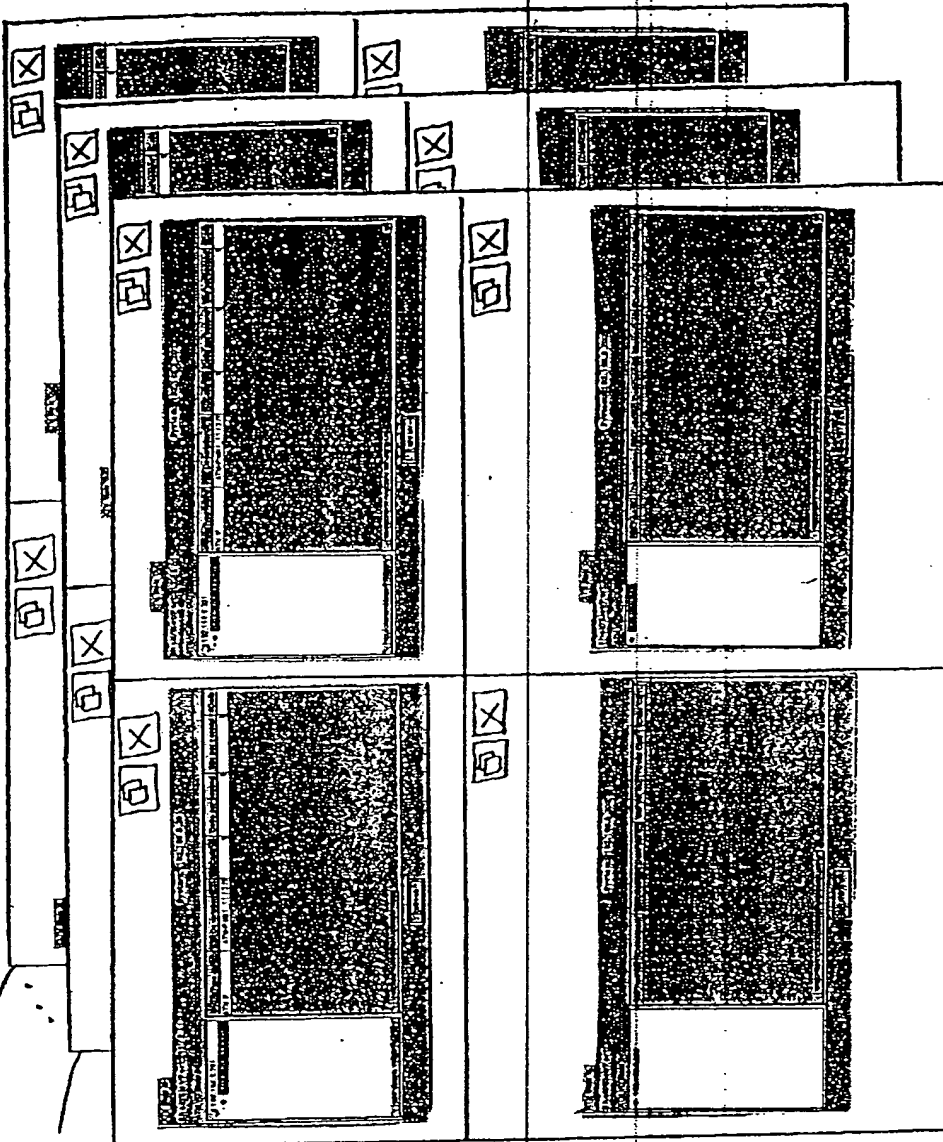
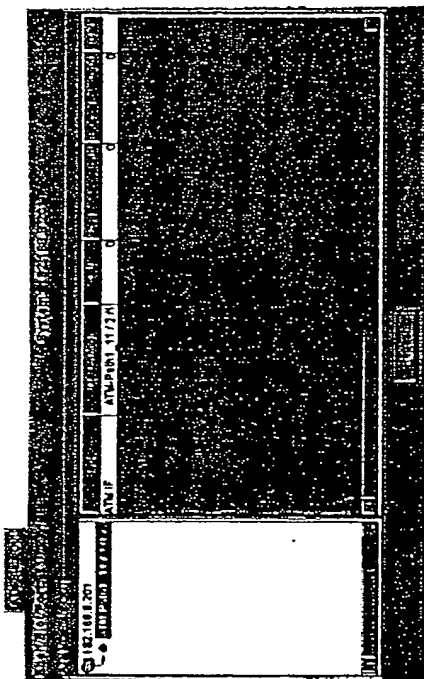


Fig. 9.98



970a



System: 192.168.9.201

Type: ATM IF

Description: ATM-Path 1\_11/21

Cells:

Cells Per Second:

Bits Per Second:

.

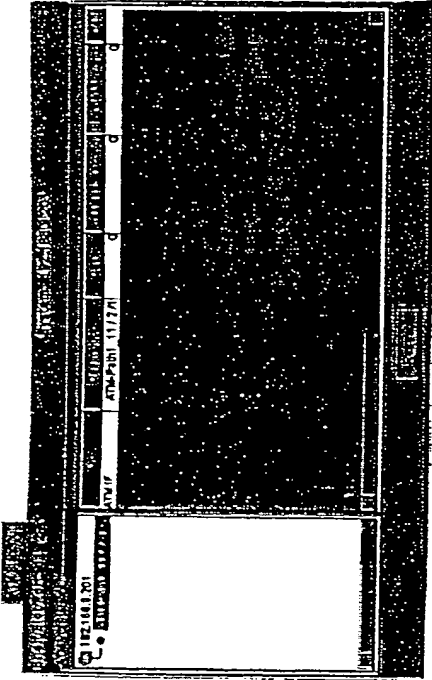
.

.

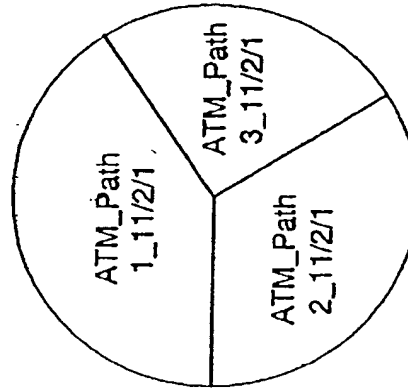
974a

Fig. 9h

← 110a



Cells Per Second



← 974b

Fig. 9i

7/10a

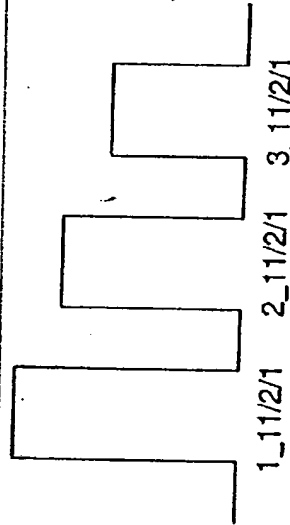
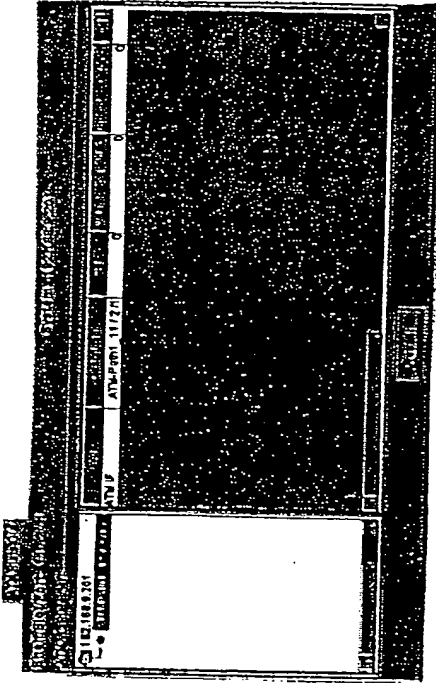
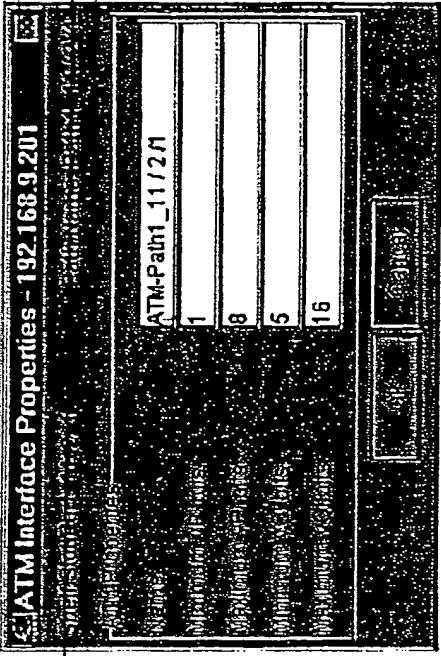
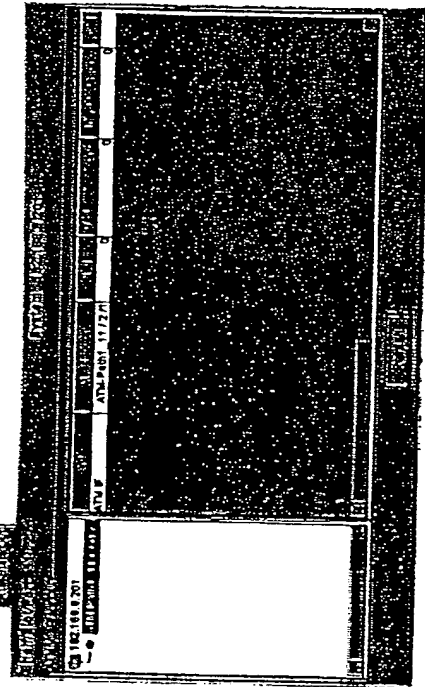


Fig. 9j

✓ 4/0a



9742

Fig. 9K

FIG. 91

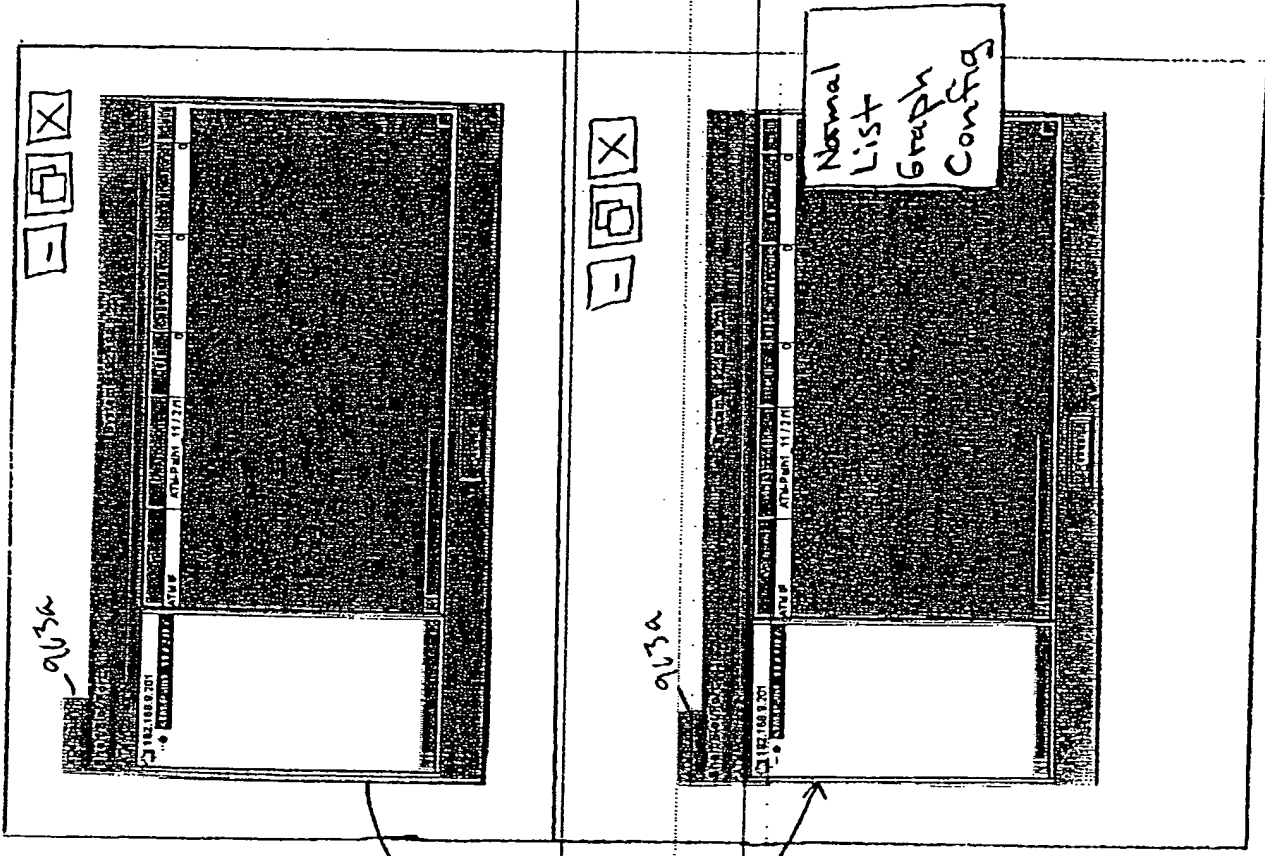


Fig. 91



970a

System: 192.168.9.201

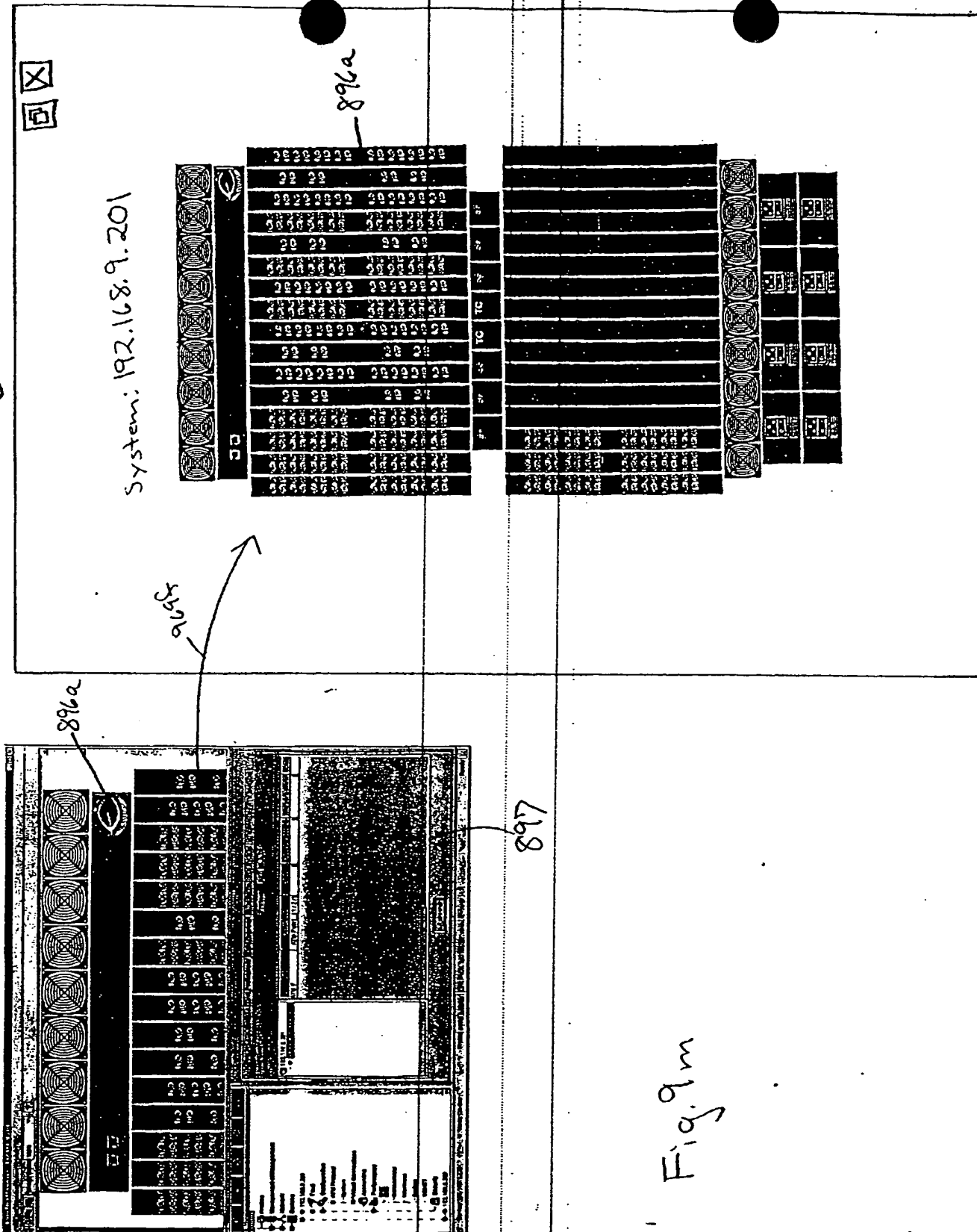
896a

896a

896a

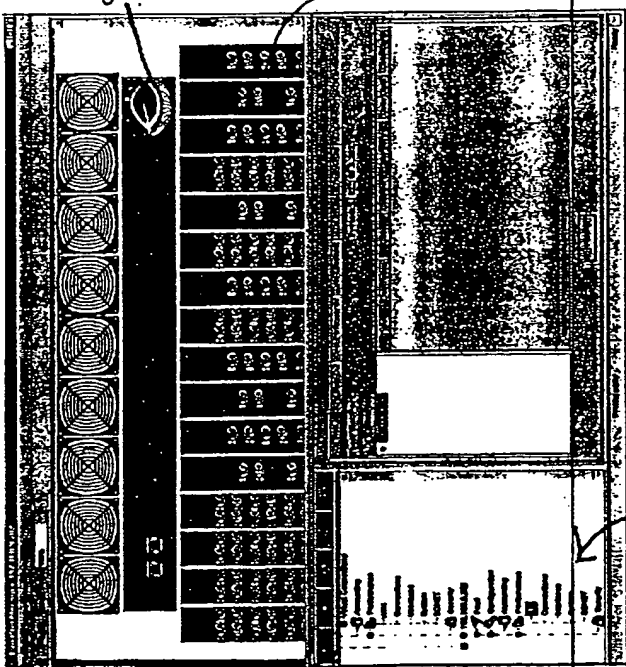
897

Fig. 9m

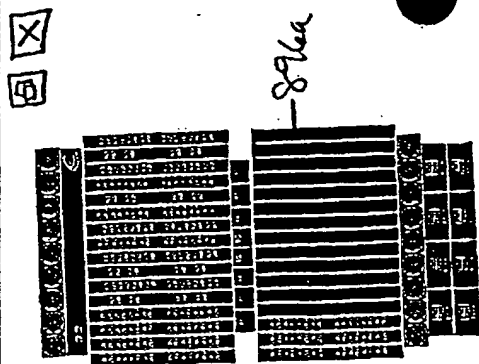


970a

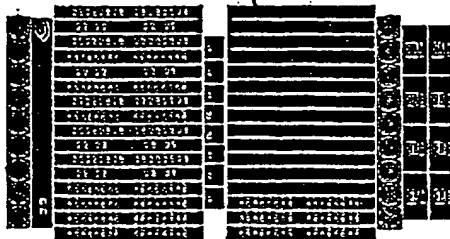
885



System:  
192.168.9.201

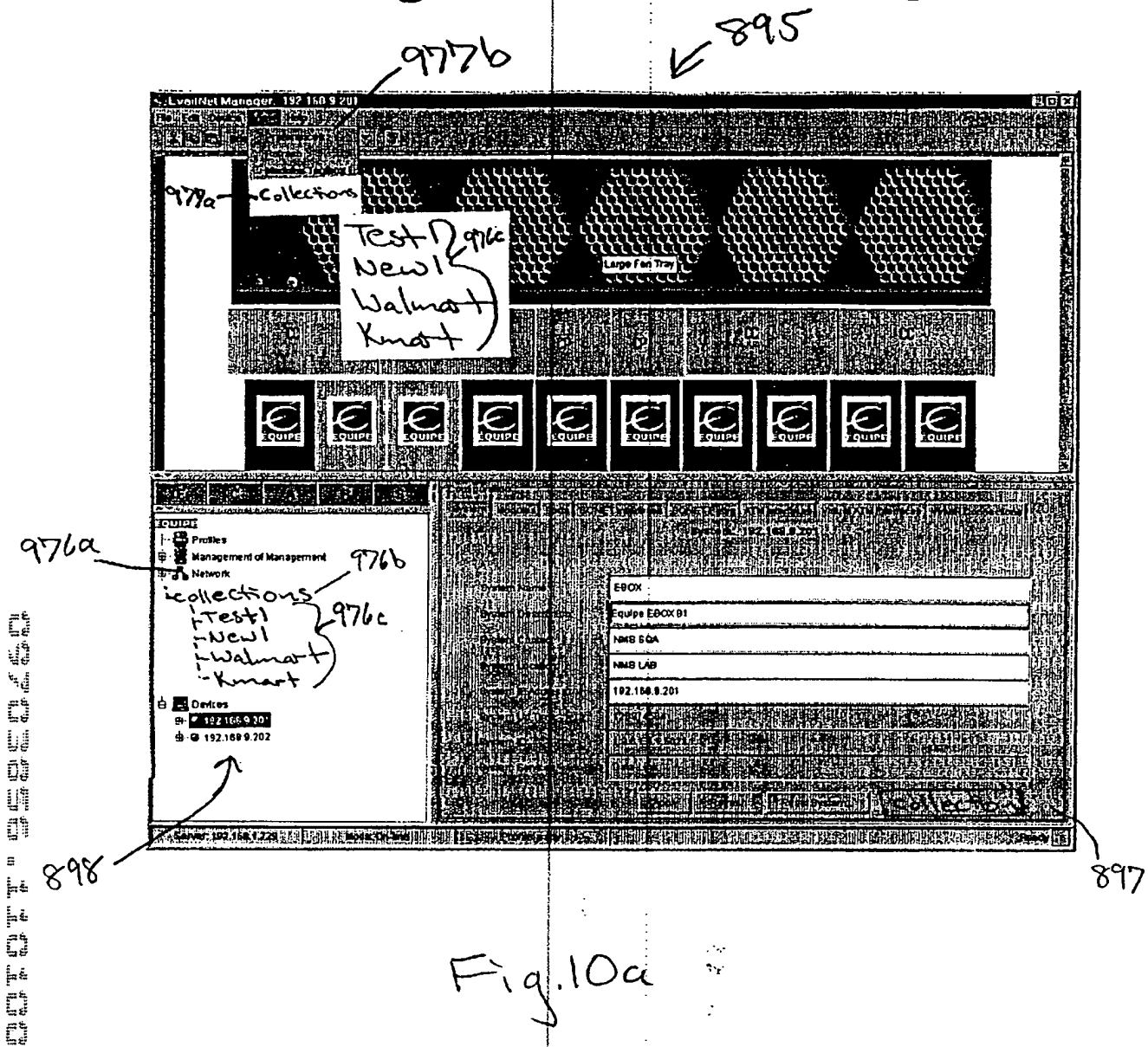


System:  
192.168.9.202



969g

Fig. 9n



895

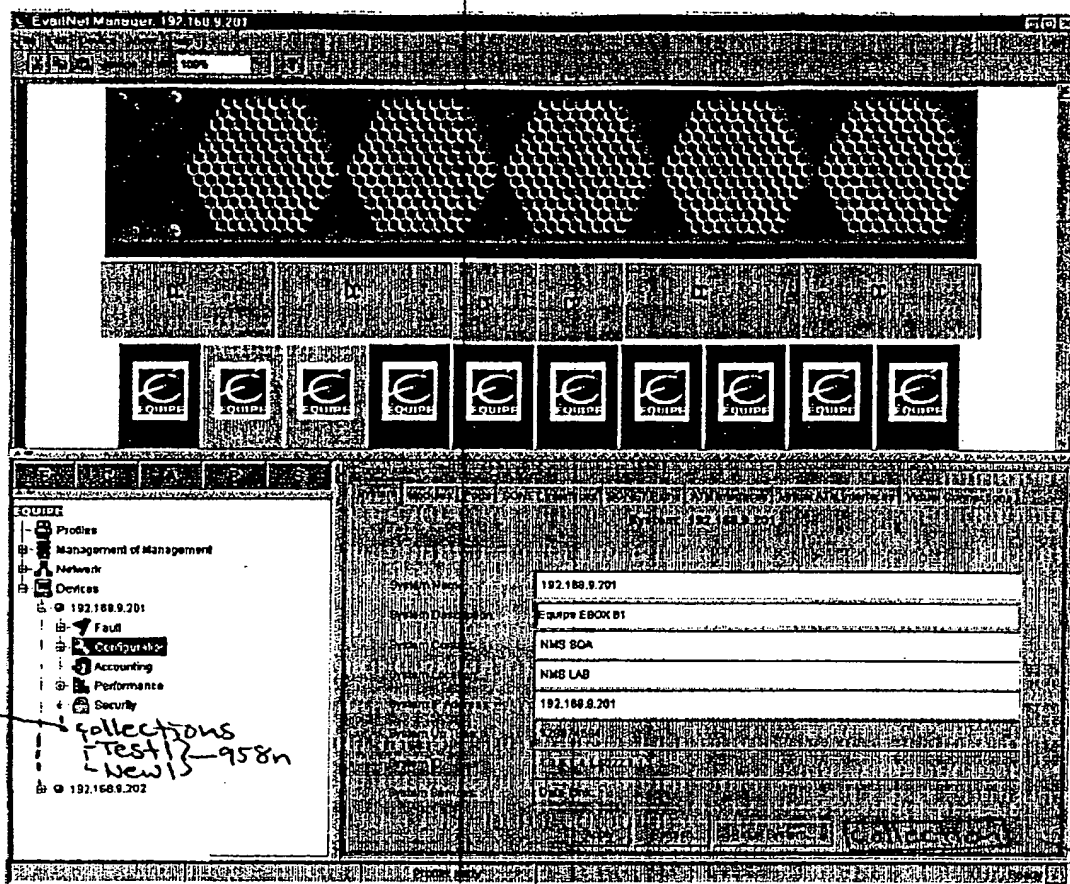


Fig. 10b

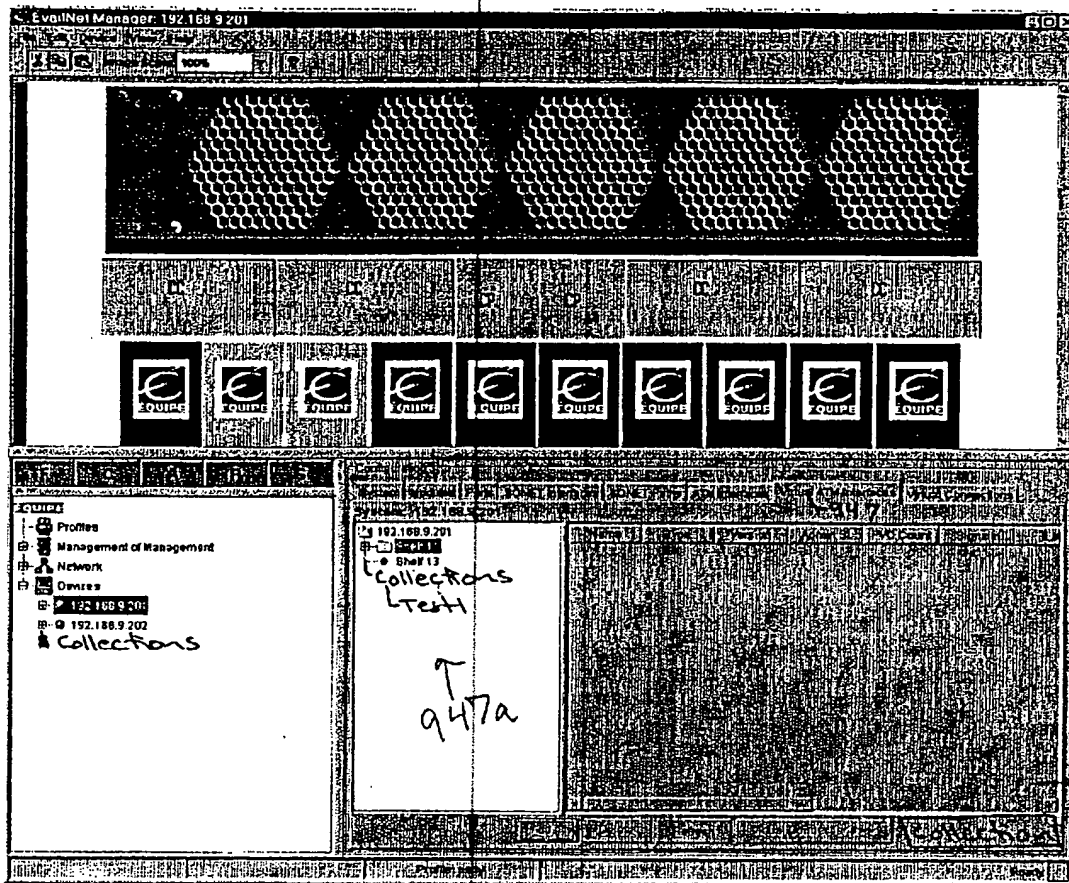


Fig. 10c

895

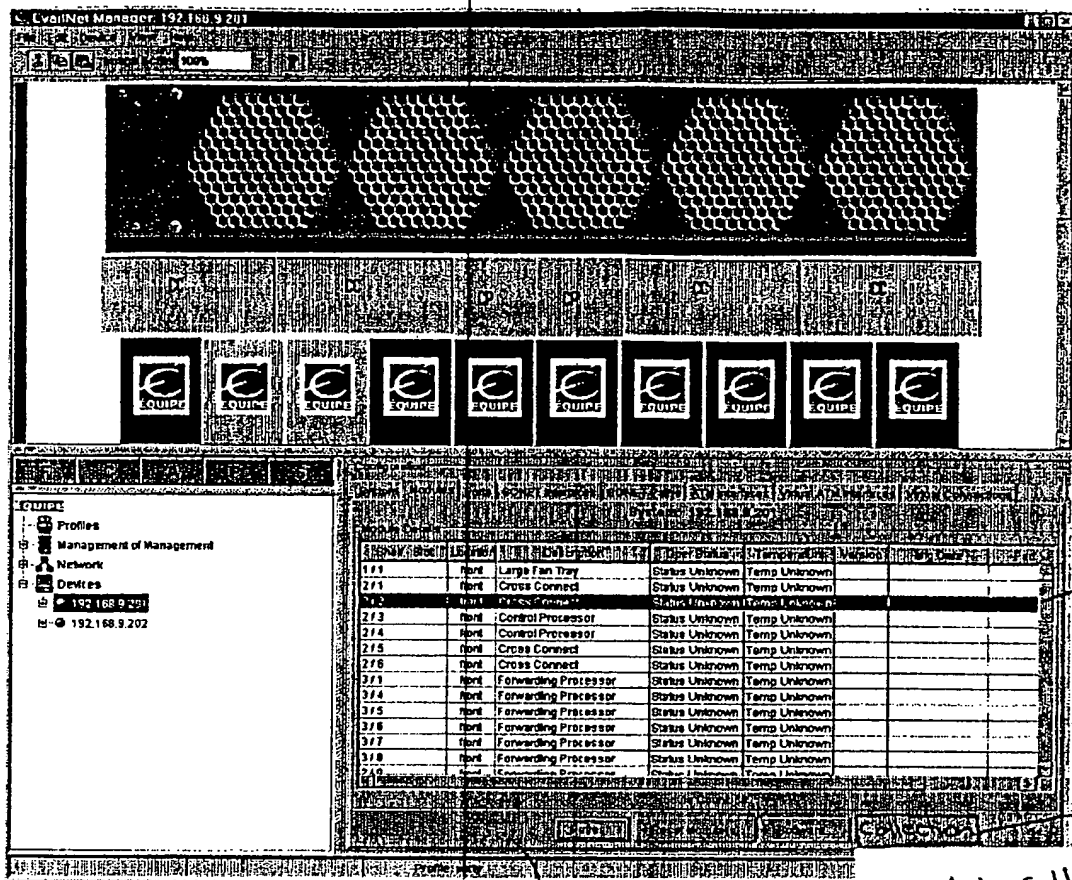


Fig. 10d

897

Add to Collection  
New Collection

979c

979d

Collection Name:

OK

Fig. 10e

979e

Existing Collections:

Test1

New1

Walmart

Kmart

OK

Fig. 10f

979f

979g

✓ 895

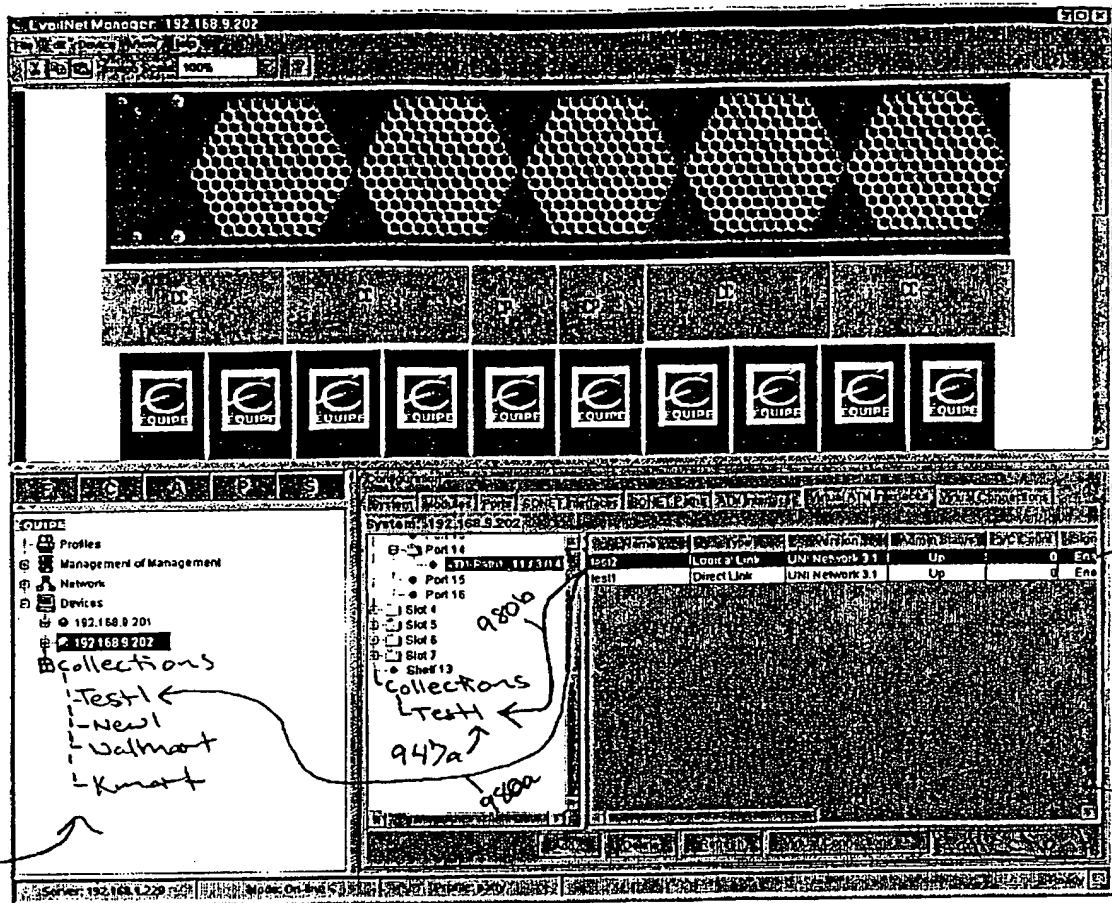
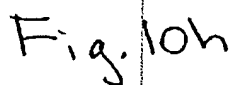


Fig. 10g





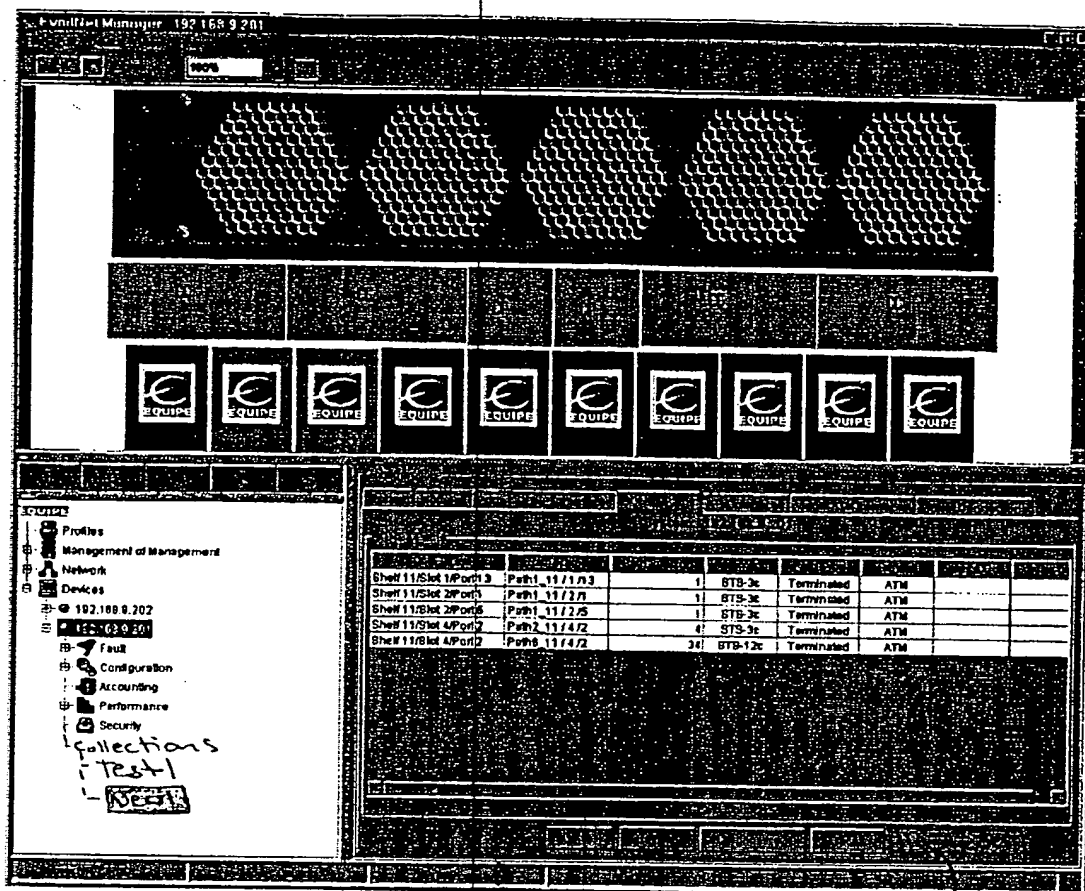


Fig. 10i

982

904

| Profile Manager |                |             |          |                          |                          |  |
|-----------------|----------------|-------------|----------|--------------------------|--------------------------|--|
| Name            | Description    | Security    | Protocol | Primary Server           | Secondary Servers        |  |
| Joe             | Joe Whitehouse | Admin       | 15       | 192.168.1.32             | 192.168.1.37             |  |
| Wayne           | (Wayne Arns)   | Provisioner | 15       | TeamServer1:192.168.1.32 | TeamServer2:192.168.1.32 |  |

905

906

Fig. 11a

907

General

Username: Kevin 908a

Description: Kevin Snow user account 908e

Group Name: Equipe 908f

Group Level Access: 908d

Password: \*\*\*\*\* 908b

Confirm Password: \*\*\*\*\* 908c

Policies

☒ User Cannot Change Password 908h

☐ Account Disabled 908i

☒ User Can Add Devices 908j

User Session Timeout: 15 908k Minutes

Servers

Primary Server: 192.168.1.220 908l

Primary Server Port: 6500 908n

Secondary Server: 192.168.1.221 908m

Secondary Server Port: 6503 908o

Devices

| Device        | READ   | READ/WRITE | Retry | Timeout |      |
|---------------|--------|------------|-------|---------|------|
| 192.168.9.202 | public | equipe     | 3     | 5       | 908p |
| 192.168.9.205 | public | equipe     | 3     | 5       | 908q |
| 192.168.9.216 | public | equipe     | 3     | 5       | 908r |

908s

OK Cancel 908t

Fig. 11b

Fig. 11c

General Policies Servers **Devices**

Primary Server: 192.168.1.220

Primary Server Port: 6500

Secondary Server: 192.168.1.205

Secondary Server Port: 6503

OK Cancel

908+

General Policies Servers **Devices**

| Device        | READ   | READ/WRITE | Retry | Timeout | Trap Port |
|---------------|--------|------------|-------|---------|-----------|
| 192.168.9.202 | public | equipe     | 3     | 5       | 162       |
| 192.168.9.205 | public | equipe     | 3     | 5       | 162       |
| 192.168.9.216 | public | equipe     | 3     | 5       | 5012      |

Add

Delete

OK Cancel

908+

Fig. 11d

Fig. 11e

General Policies Servers Devices

Username: Kevin

Description: Kevin Snow user account

Customer Name: Equipe

Group Level Access: ▼

Password: \*\*\*\*\*

Confirm Password: \*\*\*\*\*

OK Cancel

908+

General Policies Servers Devices

☒ User Cannot Change Password

☐ Account Disabled

☒ User Can Add Devices

User Session Timeout: 15 Minutes

OK Cancel

908+

Fig. 11f

904

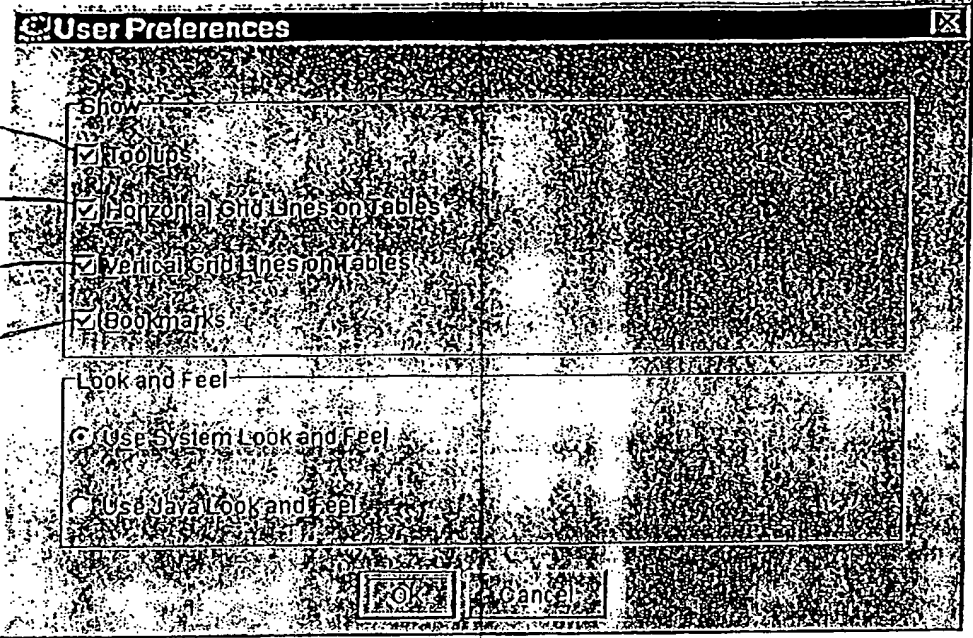


Fig. 11g

Equipe Communications

907

General

Username: Kevin 908a

Description: Kevin Snow user account 908e

Group Name: Equipe 908f

Group Level Access: 908d

Password: \*\*\*\*\* 908b

Confirm Password: \*\*\*\*\* 908c

Policies

☒ User Cannot Change Password 908h

☐ Account Disabled 908i

☒ User Can Add Devices 908j

User Session Timeout: 15 908k Minutes

Servers

Primary Server: 192.168.1.220 908l

Primary Server Port: 6500 908n

Secondary Server: 192.168.1.221 908m

Secondary Server Port: 6503 908o

Devices

| Device        | READ            | READWRITE | Retry | Timeout | Add | Delete |
|---------------|-----------------|-----------|-------|---------|-----|--------|
| 192.168.9.202 | public          | equipe    | 3     | 5       |     |        |
| Group List    |                 |           |       |         |     |        |
| 19            | Walmart-East    |           |       | ▲       |     |        |
| 19            | Walmart-West    |           |       |         |     |        |
|               | Kmart 1         |           |       |         |     |        |
|               | sears-northeast |           |       | ▼       |     |        |

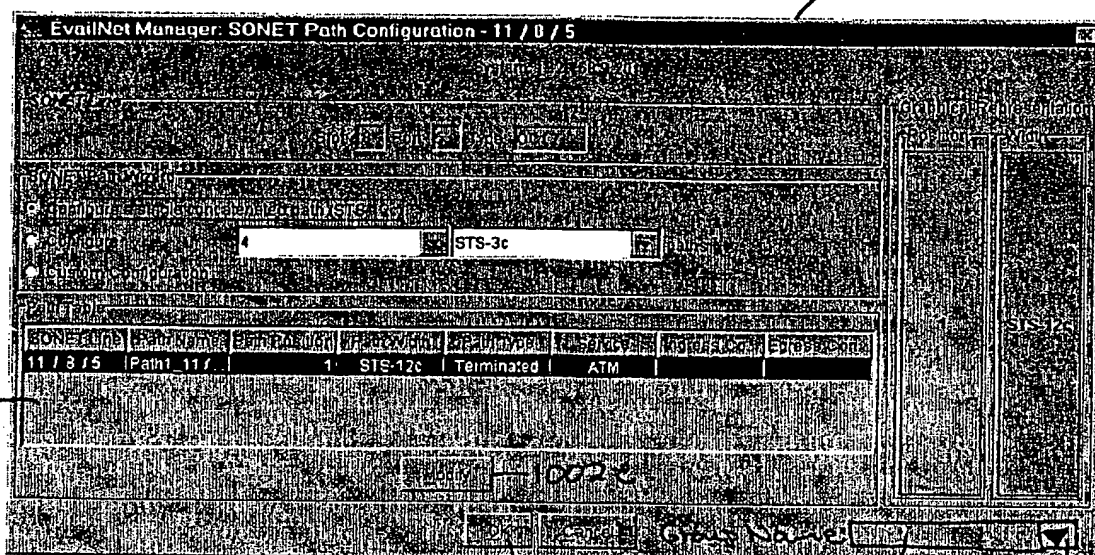
908g

1000a

1000

Fig. 11h

Fig. 11:



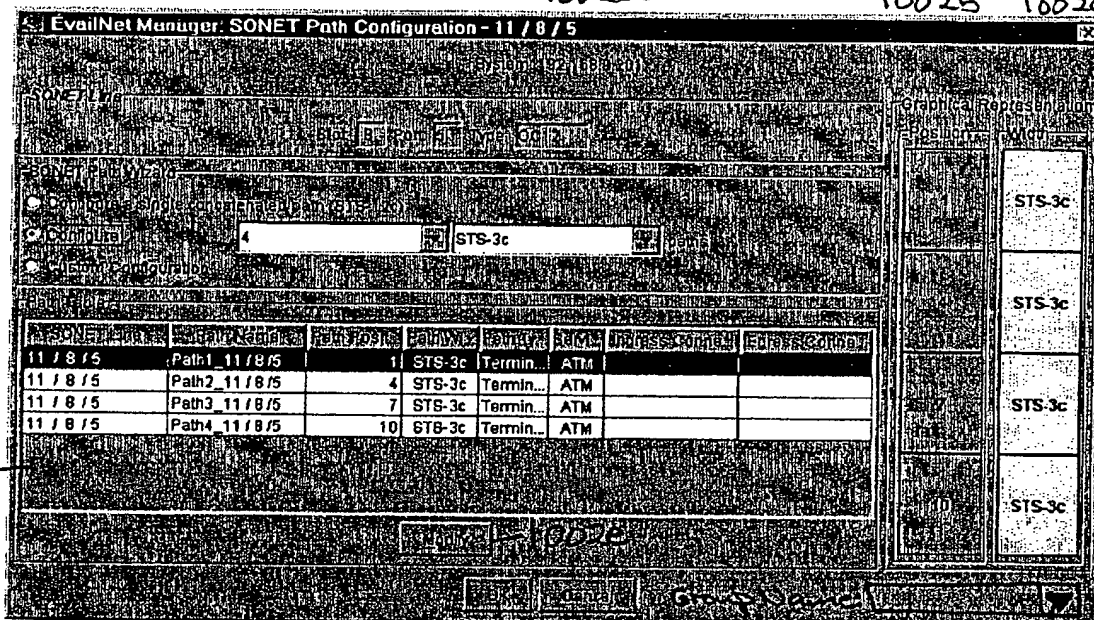
1002a

100

1002d

10024

10336



Ion 2a-

-1002d

10024

102c

F. g. 11j



Fig. 11K

EvailNet Manager: SONET Path Configuration - 11/8/5

SONET Path Name: STS-3c

Path Name: STS-3c

Path Name: STS-3c

Path Name: STS-3c

| Path Name | Path Name    | Path Name | Path Name | Path Name | Path Name | Path Name | Path Name |
|-----------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 11/8/5    | Path1_11/8/5 | 1         | STS-3c    | Termi...  | ATM       |           |           |
| 11/8/5    | Path2_11/8/5 | 4         | STS-3c    | Termi...  | ATM       |           |           |
| 11/8/5    | Path3_11/8/5 | 7         |           | Termi...  | ATM       |           |           |

1002a

1002b

1002c

Add V-ATM Interface - 192.168.9.201

Short Name: Path1\_11/8/5

Path Name: Path1\_11/8/5

Virtual V-ATM Interface Parameters:

Name (Alphanumeric):

Connection Type: Direct Link

Version: UNI Network 3.1

Channel Status: Up

OK

Cancel

1004

1004a

1004b

1004c

Fig. 11n

Fig. 11L

Managed Resource Group Table

1008

1008a

1008b

1008c

1008d

| LID  | Managed Device PID | Group Name   |
|------|--------------------|--------------|
| 1145 | 1                  | Walmart-East |
| ⋮    | ⋮                  | ⋮            |

Fig. 11M

Managed Resource Table

1007

1007a

1007b

1007c

| LID  | Resource LID | Manage Resource Group LID |
|------|--------------|---------------------------|
| 4443 | 901          | 1145                      |
| ⋮    | ⋮            | ⋮                         |

← 1006

**EvailNet Manager: 192.168.9.201 - Virtual Connection Wizard**

Source: 192.168.9.201      Destination: 192.168.9.201

**Source Point:**

- 192.168.9.201
  - Shelf 11
    - Slot 1
    - Slot 2
    - Slot 3
    - Slot 4
      - Port 1
      - Port 2
      - ATM-Path2\_11/4/2

**End Point:**

- 192.168.9.201
  - Shelf 11
    - Shelf 13

**Connection Parameters:**

Connection Name:

Admin Status: Up ☐

Group Name:

**End Point Parameters:**

VP:  ☐ Use Any VP Value

VCI:  ☐ Use Any VCI Value

Transmit Traffic Description:  ☐ Add Traffic Description

Receive Traffic Description:  ☐ Add Traffic Description

☐ Use the same Traffic Description for both Transmit and Receive

**End Point Parameters:**

VP:  ☐ Use Any VP Value

VCI:  ☐ Use Any VCI Value

Transmit Traffic Description:  ☐ Add Traffic Description

Receive Traffic Description:  ☐ Add Traffic Description

☐ Use the same Traffic Description for both Transmit and Receive

Fig. 110

1006c

Fig. 11p

1010

User Table

1010b

1010c

1010a

| LID  | Username | Password | Group Level Access |
|------|----------|----------|--------------------|
| 2012 | Dave     | Marble   | Provisioner        |
| ⋮    | ⋮        | ⋮        |                    |

1010d

1010e

Fig. 11q

1012

User Managed Device Table

1012a

1012b

1012c

1012d

1012e

| LID  | User LID | Host LID | Retry | Timeout |
|------|----------|----------|-------|---------|
| 7892 | 2012     | 9046     |       |         |
| ⋮    | ⋮        | ⋮        | ⋮     | ⋮       |

Fig. 11r

1014

Administration Managed Device Table

1014a

1014b

1014c

1014d

| LID  | Host Address  | Port Address | Retry | Timeout | Admin. Password | Prov. Password | Viewer Password |
|------|---------------|--------------|-------|---------|-----------------|----------------|-----------------|
| 9046 | 192.168.9.202 | 1521         |       |         | team 1          | team 2         | team 3          |
| ⋮    | ⋮             | ⋮            | ⋮     | ⋮       | ⋮               | ⋮              | ⋮               |

Fig. 11s

1013

**Add Delete Device Dlg** [X]

1013a — Device Host: 192.168.1.202

1013b — Device Port: 1521

1013c — SNMP Retry:

1013d — SNMP Timeout:

1013e — Admin. Password:

1013f — Prov. Password:

1013g — Viewer Password:

1013h — Add

OK Cancel Delete

1013i

Fig. 11t

**User Resource Group Map Table**

|       |                         |          |       |
|-------|-------------------------|----------|-------|
| 1016b |                         |          | 1016  |
| 1016a | LID                     | User LID |       |
|       | 8086                    | 2012     |       |
|       | ⋮                       | ⋮        |       |
|       | User Resource Group LID |          | 1016c |
|       | 1024                    |          |       |
|       | ⋮                       |          |       |

Fig. 11u

**User Resource Group Table**

|       |          |              |      |
|-------|----------|--------------|------|
| 1018a | 1018b    | 1018c        | 1018 |
| LID   | Host LID | Group Name   |      |
| 1024  | 9046     | Walmart-East |      |
| ⋮     | ⋮        | ⋮            |      |
| 1018d |          |              |      |

Fig. 11v

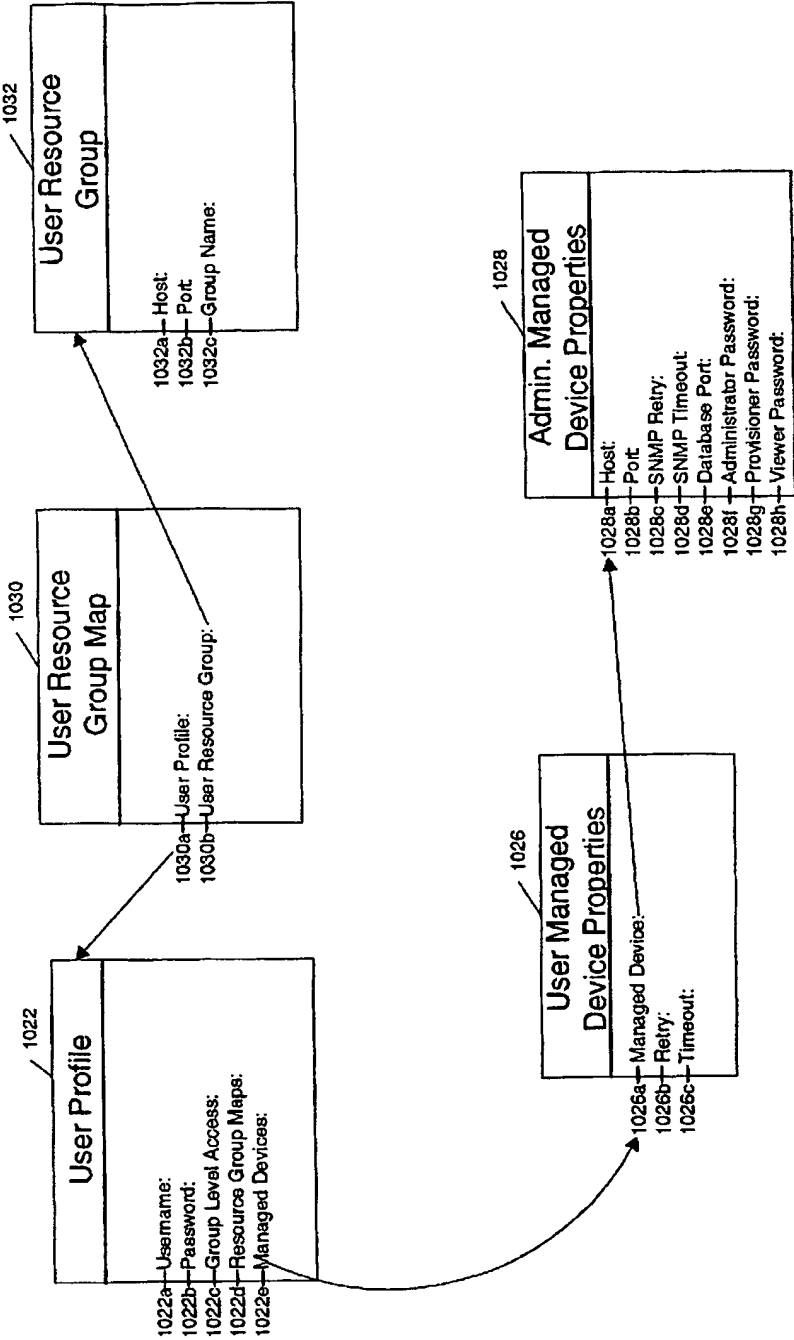


FIG. 11W is a block diagram of a Network Management System (NMS) architecture. The system includes an NMS Server (851a) and an NMS Client (850a). The NMS Server is connected to a User Profile LMO (1024) and a User Profile LMO (987a). The NMS Server is also connected to a Config. D.B. (42) and an NMS Database (61). The Config. D.B. contains tables: MR. Group Table (1008), M.R. Table (1007), SONET Path Table (600), V. Conn Table (994), Cross-Connect Table (966), V. Link Table (995), and V. ATM Table (993). The NMS Database contains tables: User Table (1010), User M.D. Table (1012), Admin. M.D. Table (1014), Class Table (1020), User R.G. Map Table (1016), and User R.G. Table (1018). The NMS Client is connected to GUI Tables (965) and NMS Client (850a). The NMS Client is also connected to the Config. D.B. and the NMS Database.

Fig. 11w

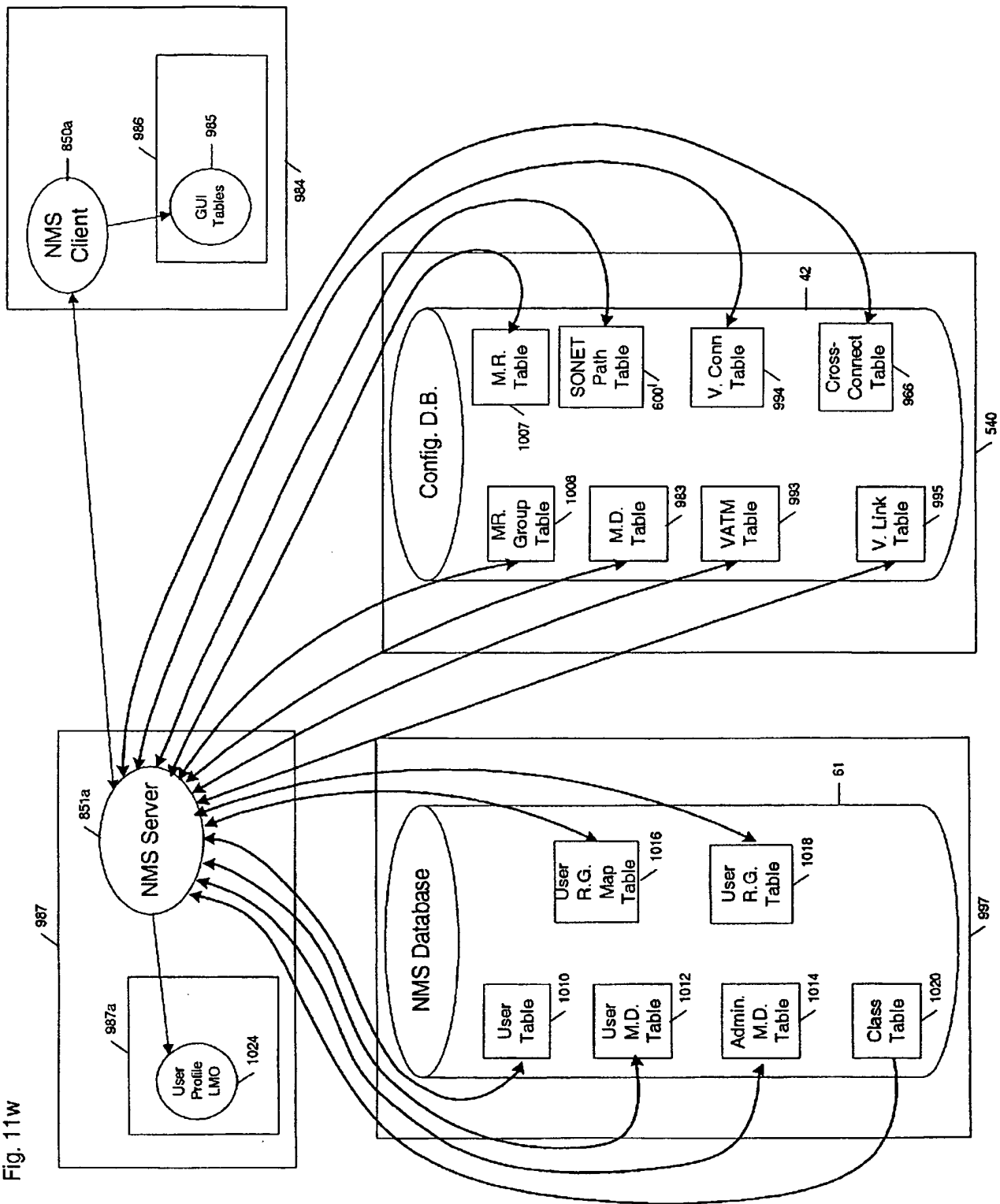
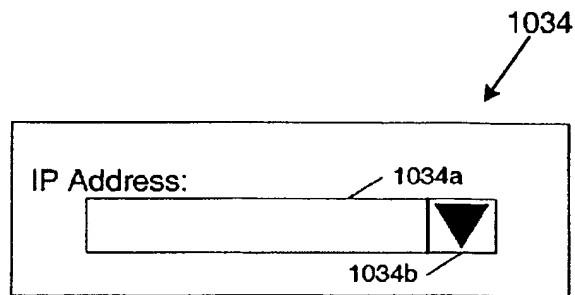


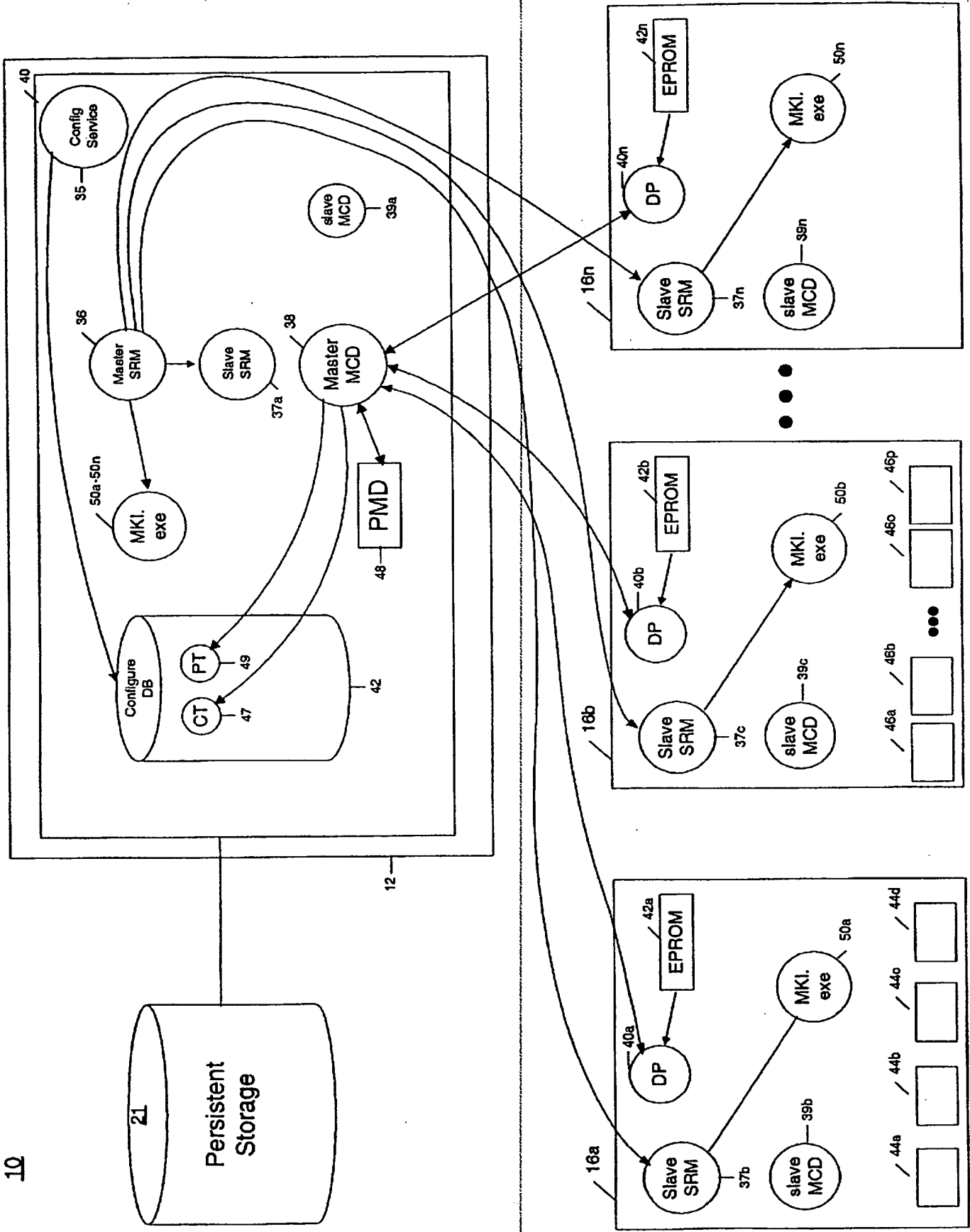


Fig. 11x



Equipe Communications

FIG. 12a



CARD TABLE

47

| PID        | CWD TYPE | VERSION NO. | SLOT NO. | ...    |
|------------|----------|-------------|----------|--------|
| 16 a — 500 | 0XF002   | 3           | 1        |        |
| 16 b — 501 | 0XF002   | 4           | 2        |        |
| •<br>•     | •<br>•   | •<br>•      | •<br>•   | •<br>• |
| 16 e — 505 | 0X6002   | 1           | 5        |        |
| •<br>•     | •<br>•   | •<br>•      | •<br>•   | •<br>• |
| 16 n — 513 | 0XF002   | 1           | 12       |        |
| •<br>•     | •<br>•   | •<br>•      | •<br>•   | •<br>• |

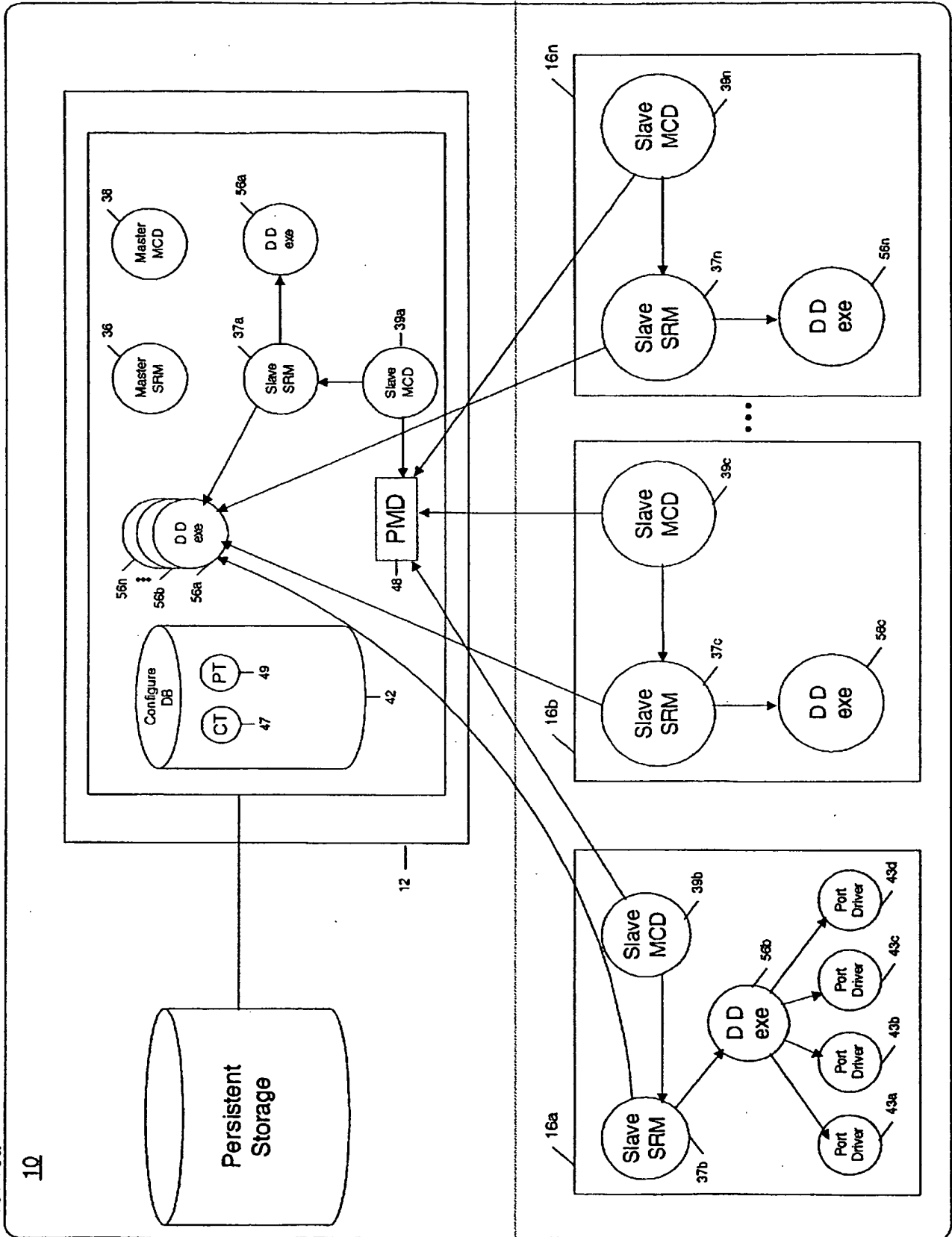
FIG. 12b

PORT TABLE

49

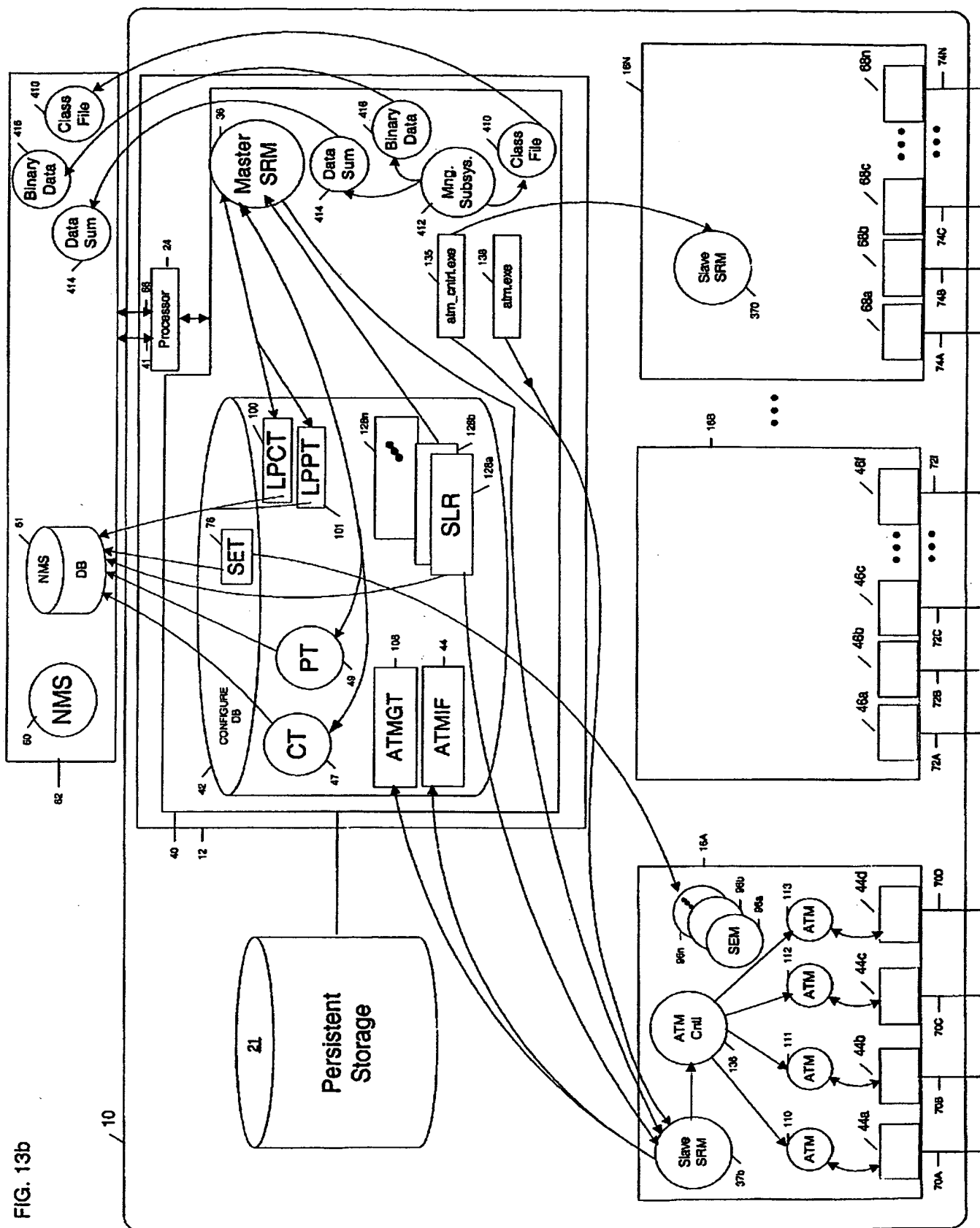
| PID        | PORT TYPE | VERSION NO. | SLOT NO. | ... |
|------------|-----------|-------------|----------|-----|
| 44a — 1500 | 00620     | 1           | 1        |     |
| 44b — 1501 | 00620     | 1           | 1        |     |
| 44c — 1502 | 00620     | 1           | 1        |     |
| 44d — 1503 | 00620     | 1           | 1        |     |
| 44a — 1504 | 00820     |             |          |     |
| 46a — :    | :         | :           | :        | :   |
|            | :         | :           | :        | :   |
| 1600       | 00620     | 1           | 8        |     |
| :          | :         | :           | :        | :   |
| :          | :         | :           | :        | :   |

FIG. 12c



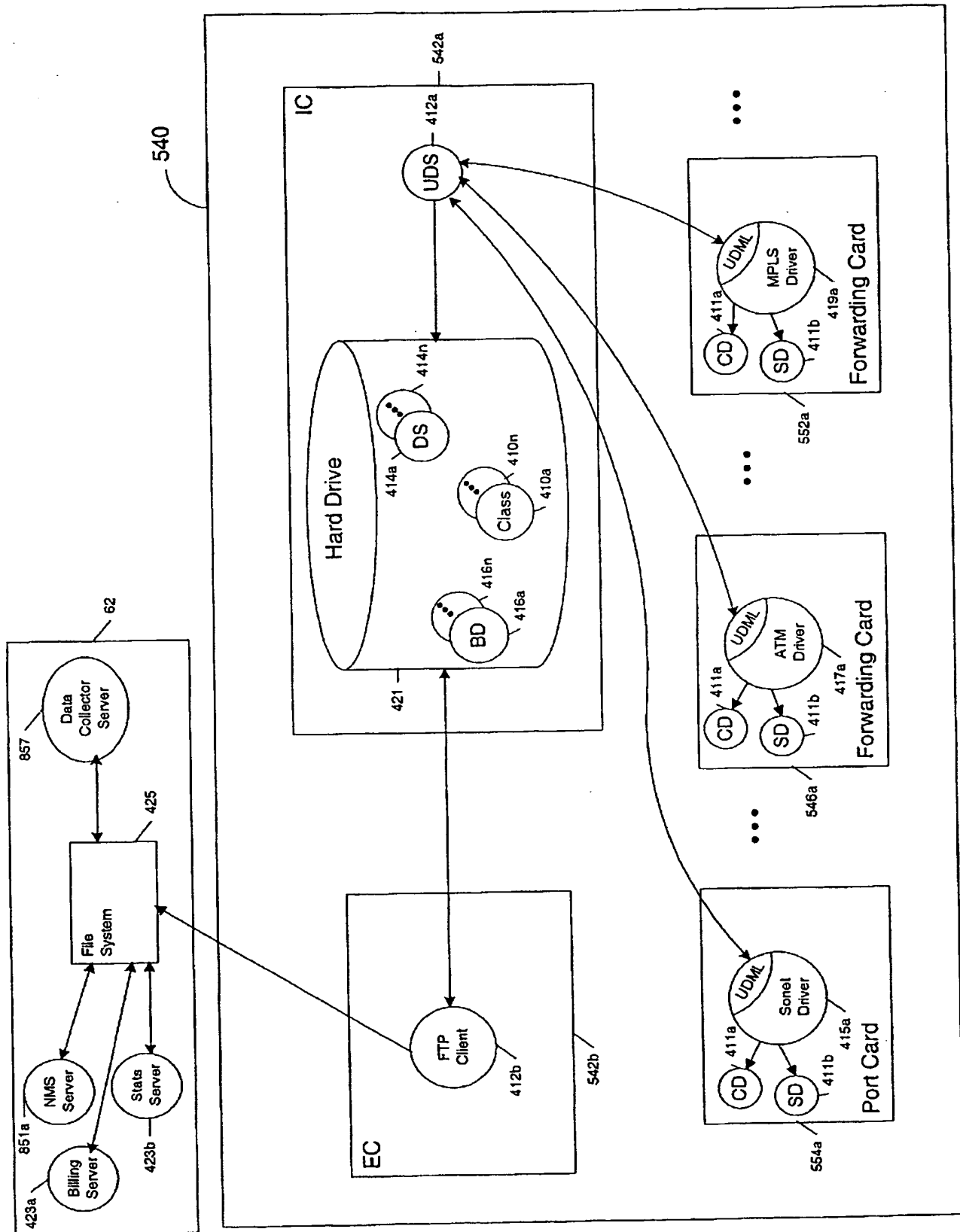
SCANNED. # 6

**FIG. 13b**



SCANNED, #\_6

Fig. 13c



SCANNED, # 6

Fig. 13d

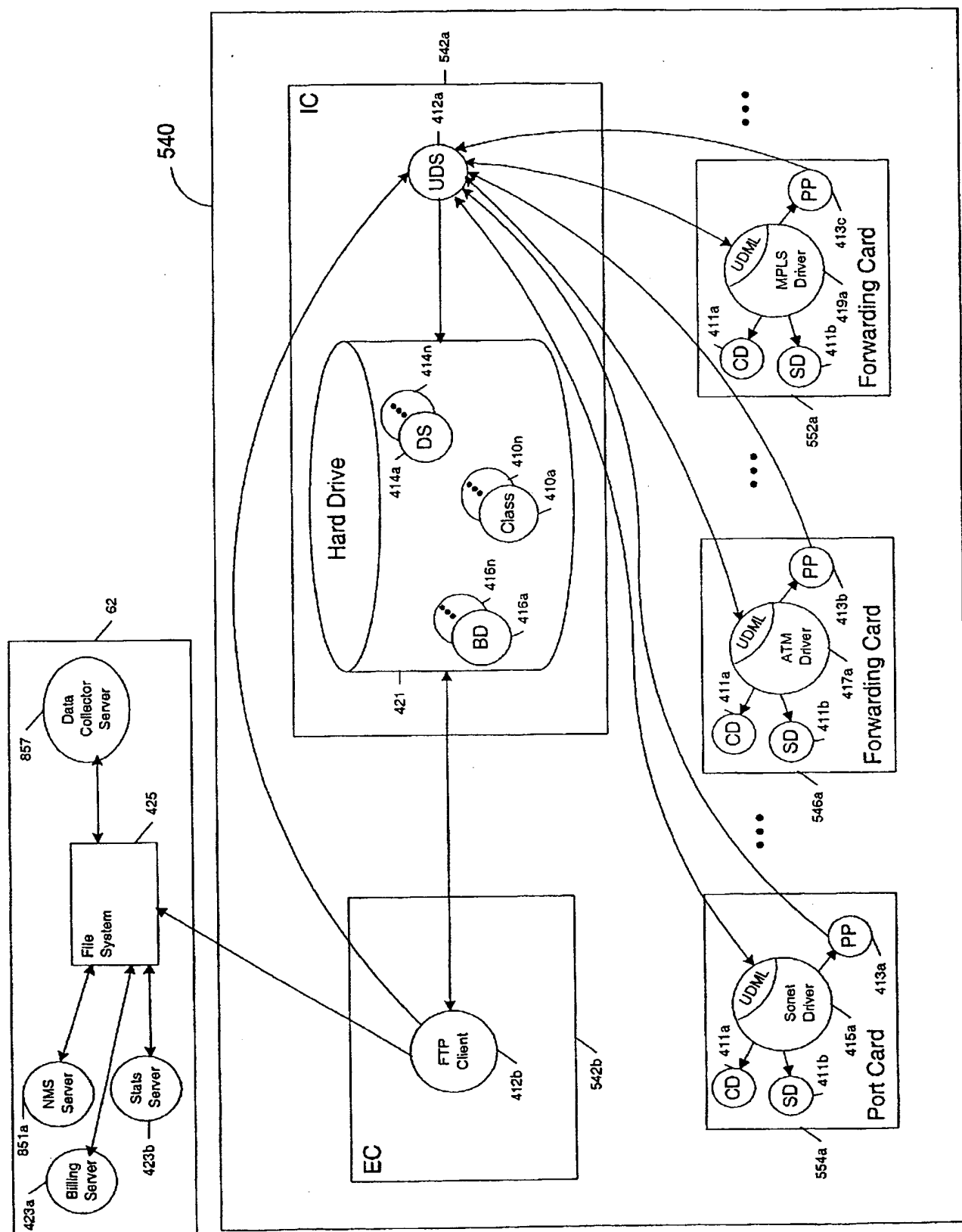




FIG. 14a

Service Endpoint Table 76

|     | Service<br>Endpoint # | Port PID |
|-----|-----------------------|----------|
| 78  | 1                     | 1500     |
| 80  | 2                     | 1501     |
| 82  | 3                     | 1501     |
| 84  | 4                     | 1501     |
| 86  | 5                     | 1502     |
| 88  | 6                     | 1502     |
| 90  | 7                     | 1503     |
| 92  | 8                     | 1503     |
| 94  | 9                     | 1503     |
| 168 | 10                    | 1502     |
|     | ⋮                     | ⋮        |

FIG. 14b

Logical to Physical Card Table 100

|     | 98<br>LID | 102<br>Primary<br>PID | 104<br>Back-up<br>PID |
|-----|-----------|-----------------------|-----------------------|
| 106 | 30        | 500                   | 513                   |
| 109 | 31        | 501                   | 513                   |
|     | ⋮         | ⋮                     | ⋮                     |

FIG. 14c

Logical to Physical Port Table 101

|     | 98<br>LID | 102<br>Primary<br>PID | 104<br>Back-up<br>PID |
|-----|-----------|-----------------------|-----------------------|
| 107 | 40        | 1500                  | 1600                  |
|     | ⋮         | ⋮                     | ⋮                     |

FIG. 14d

ATM Group Table 108

| Group # | Card LID | ... |
|---------|----------|-----|
| 1       | 30       |     |
| 2       | 30       |     |
| 3       | 30       |     |
| 4       | 30       |     |

FIG. 14e

ATM Interface Table 114

| ATM IF | ATM Group | SE | ... |
|--------|-----------|----|-----|
| 1      | 1         | 1  |     |
| 2      | 1         | 1  |     |
| 3      | 1         | 1  |     |
| 4      | 2         | 2  |     |
| 5      | 2         | 3  |     |
| 6      | 2         | 4  |     |
| ⋮      | ⋮         | ⋮  | ⋮   |
| 12     | 3         | 10 |     |
| ⋮      | ⋮         | ⋮  | ⋮   |

FIG. 14f

Software Load Record 128a

|     |              |     |     |
|-----|--------------|-----|-----|
| 130 | Control Shim | LID | 132 |
| 134 | atm-cntl.exe | 30  |     |

FIG. 15

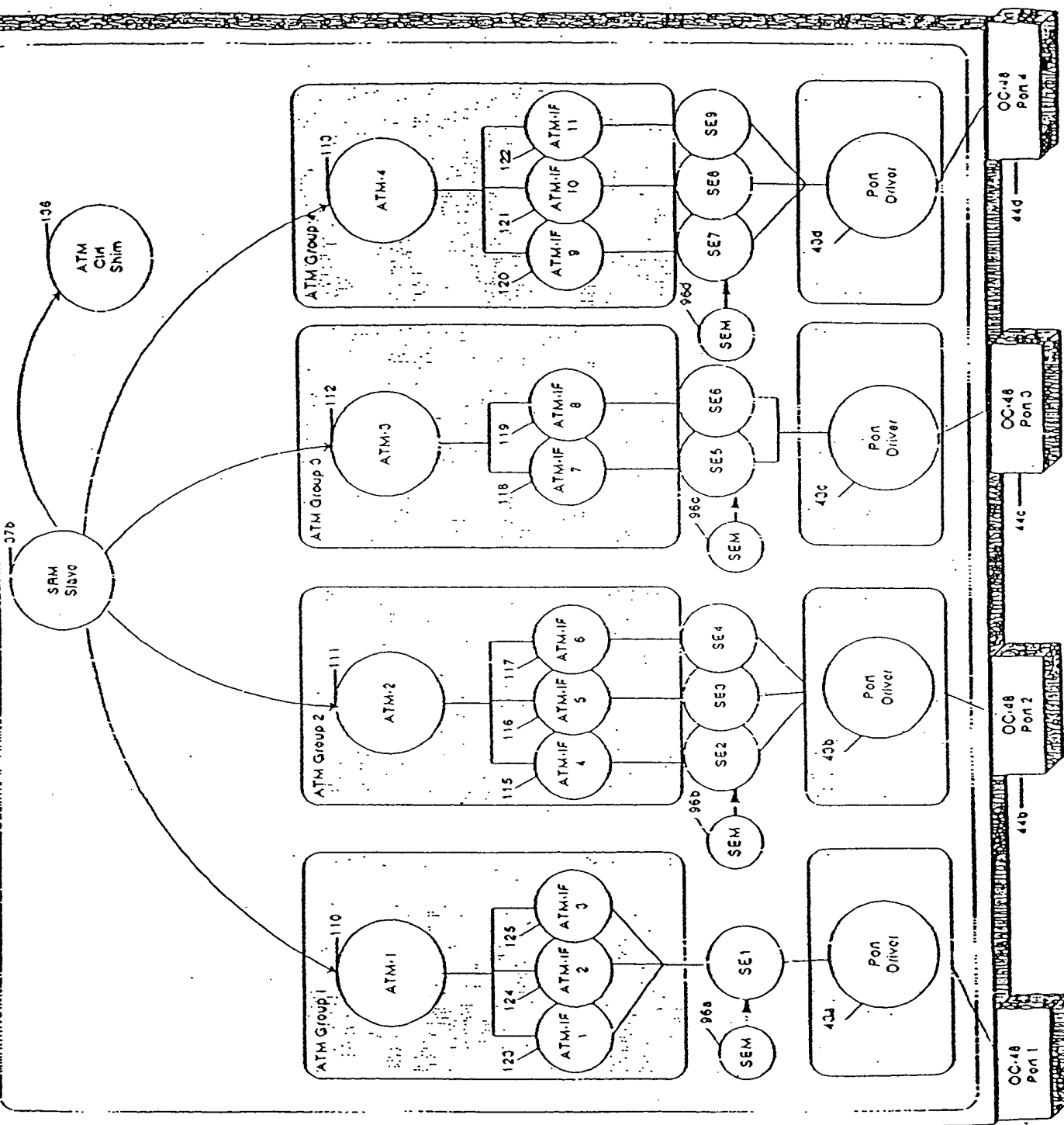


FIG. 16a

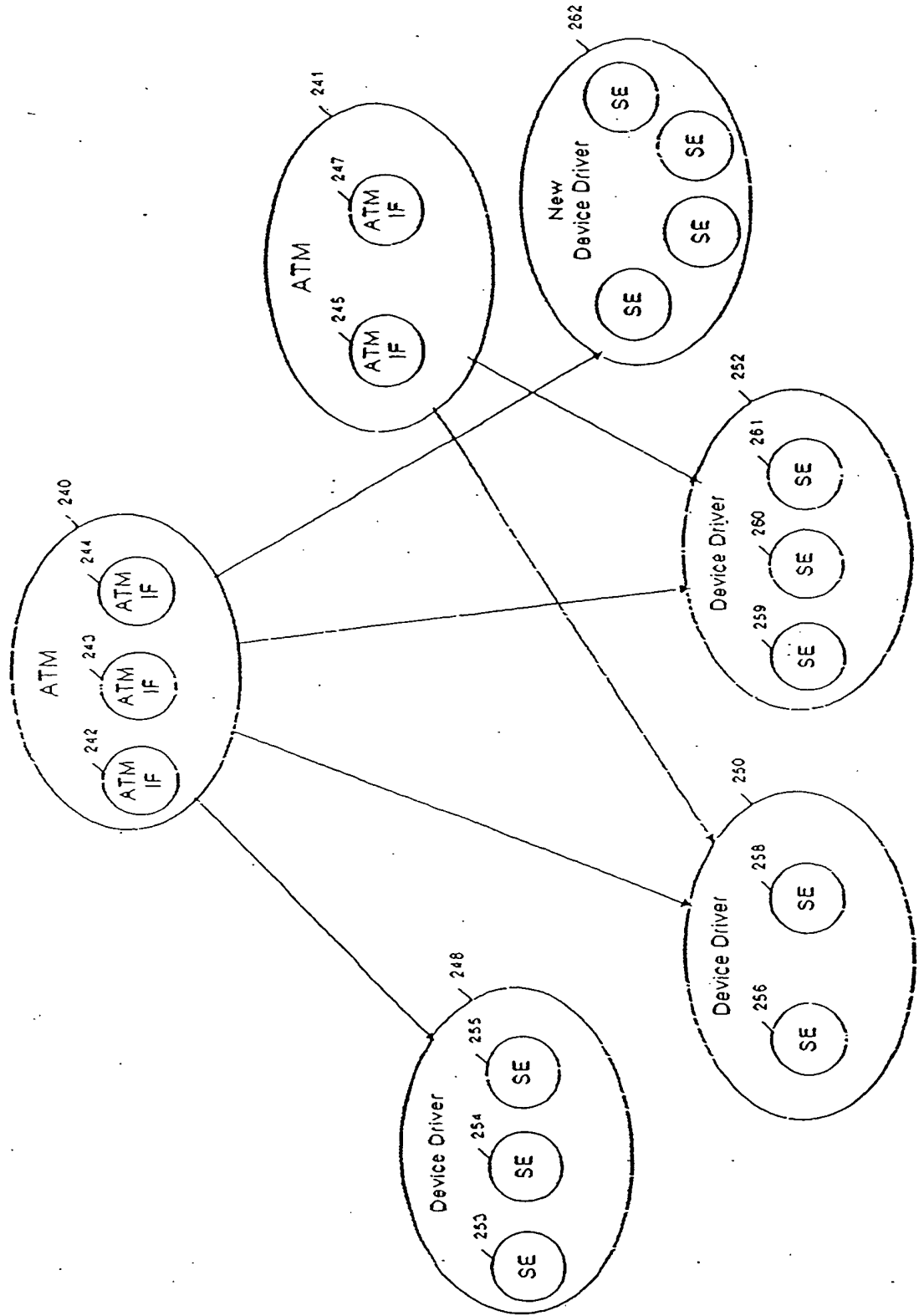
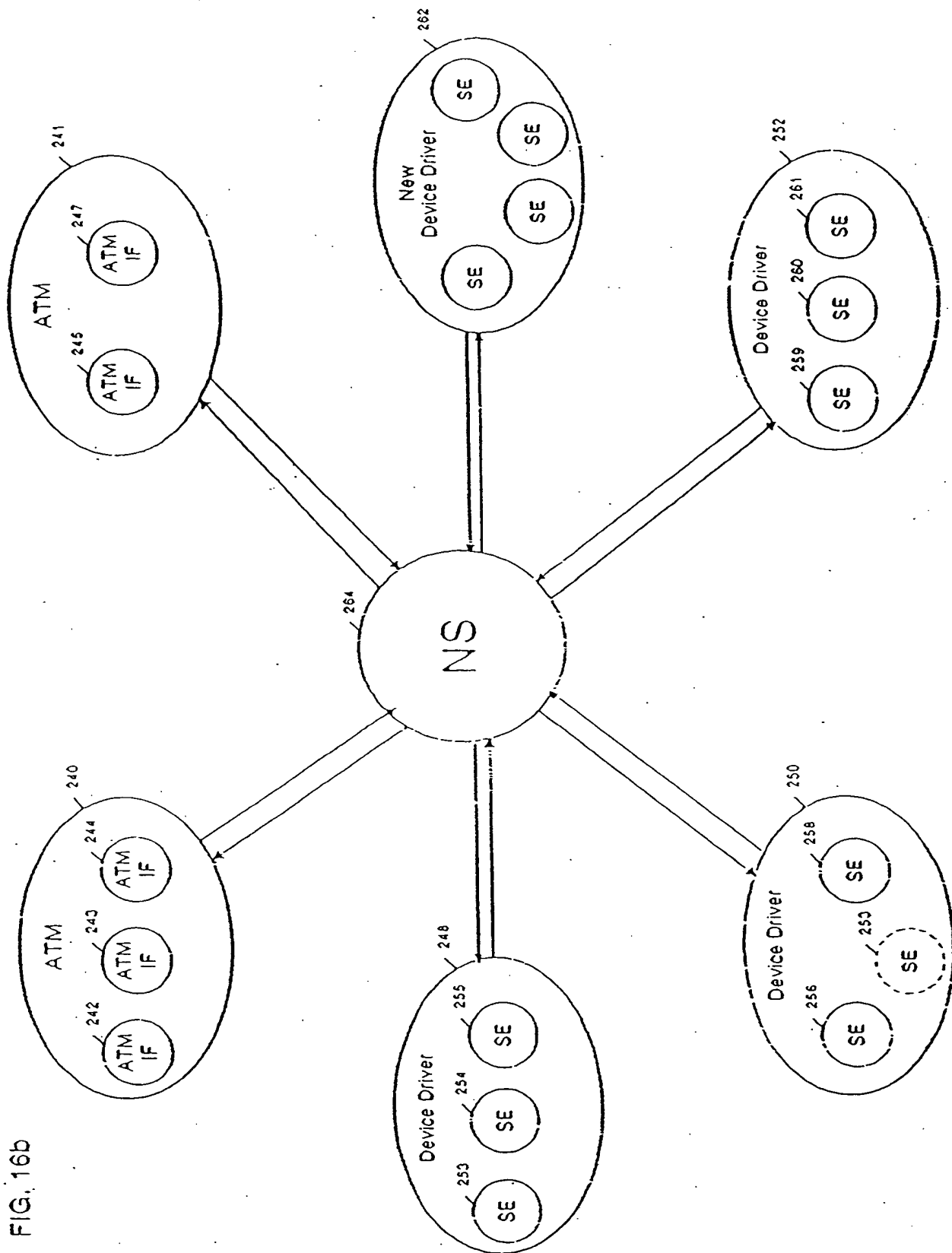


FIG. 16b



1. The first part of the report is a general statement of the purpose and scope of the study. It states that the purpose is to determine the effect of the new tax law on the income of individuals. The scope of the study is limited to the income of individuals who are subject to the new tax law.

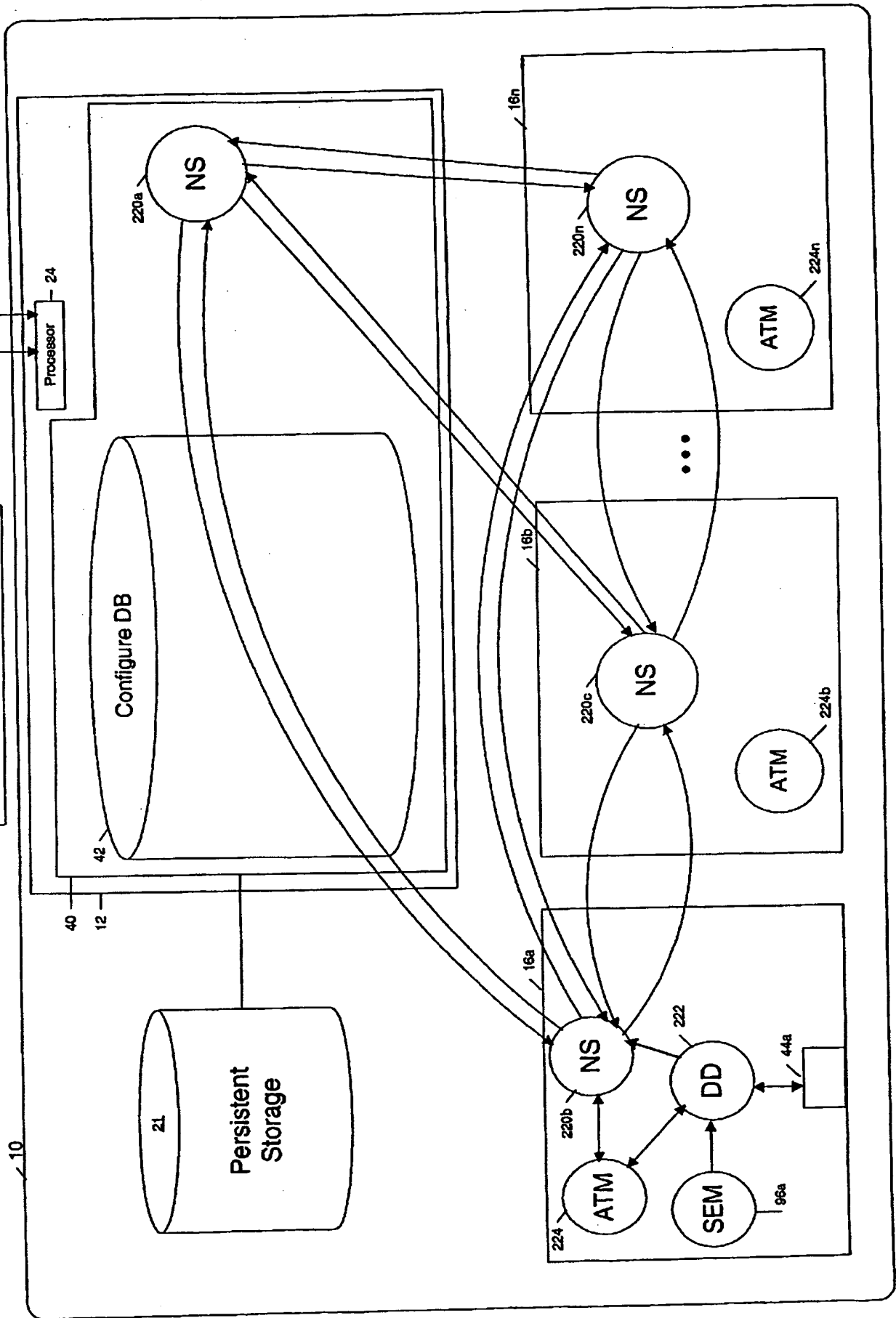
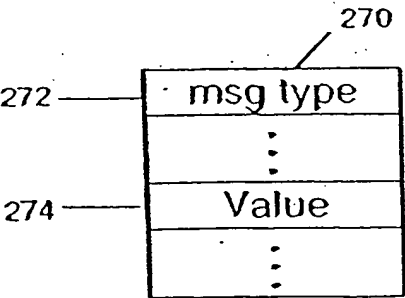


FIG. 16d



**FIG. 17**

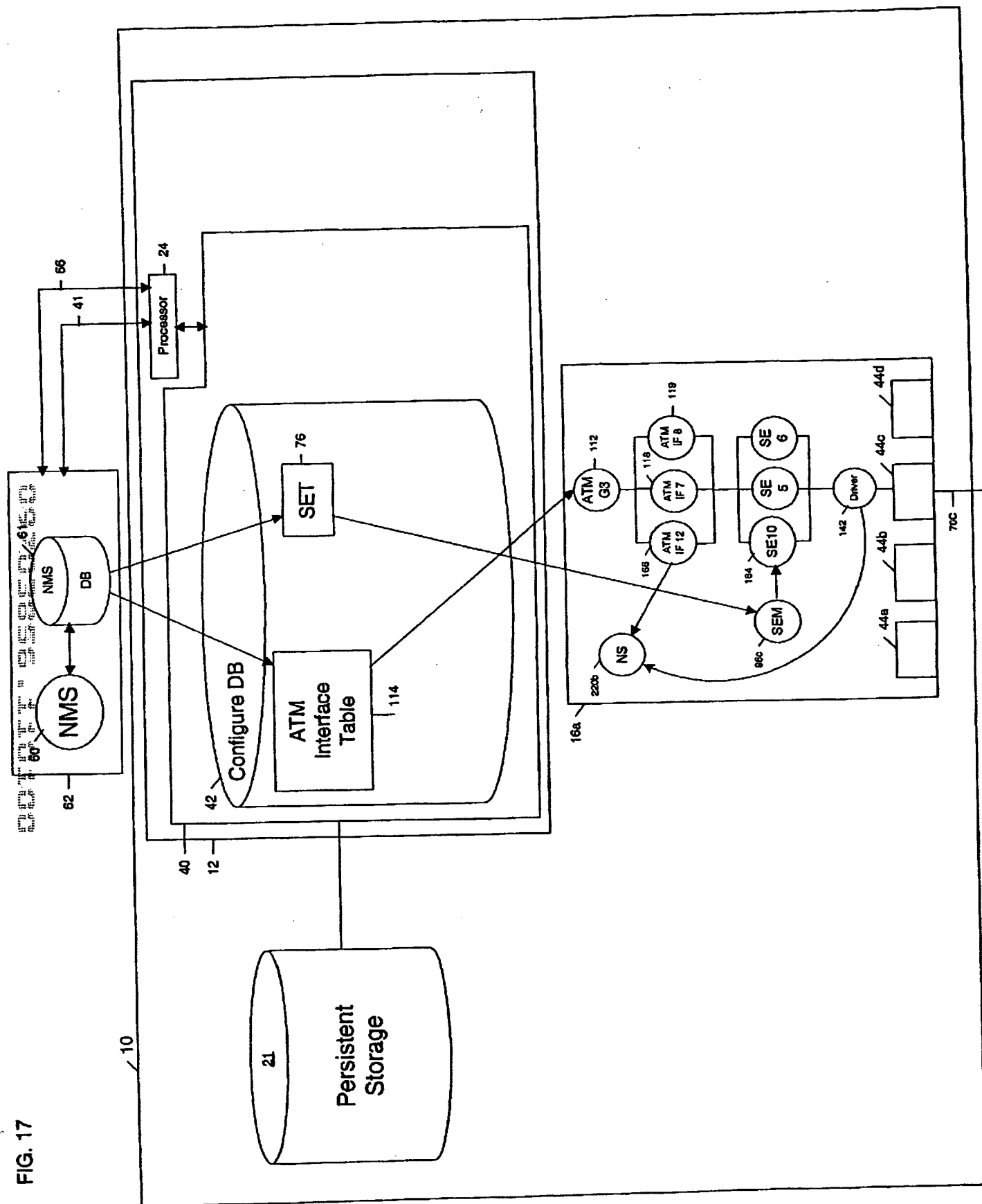




FIG. 18

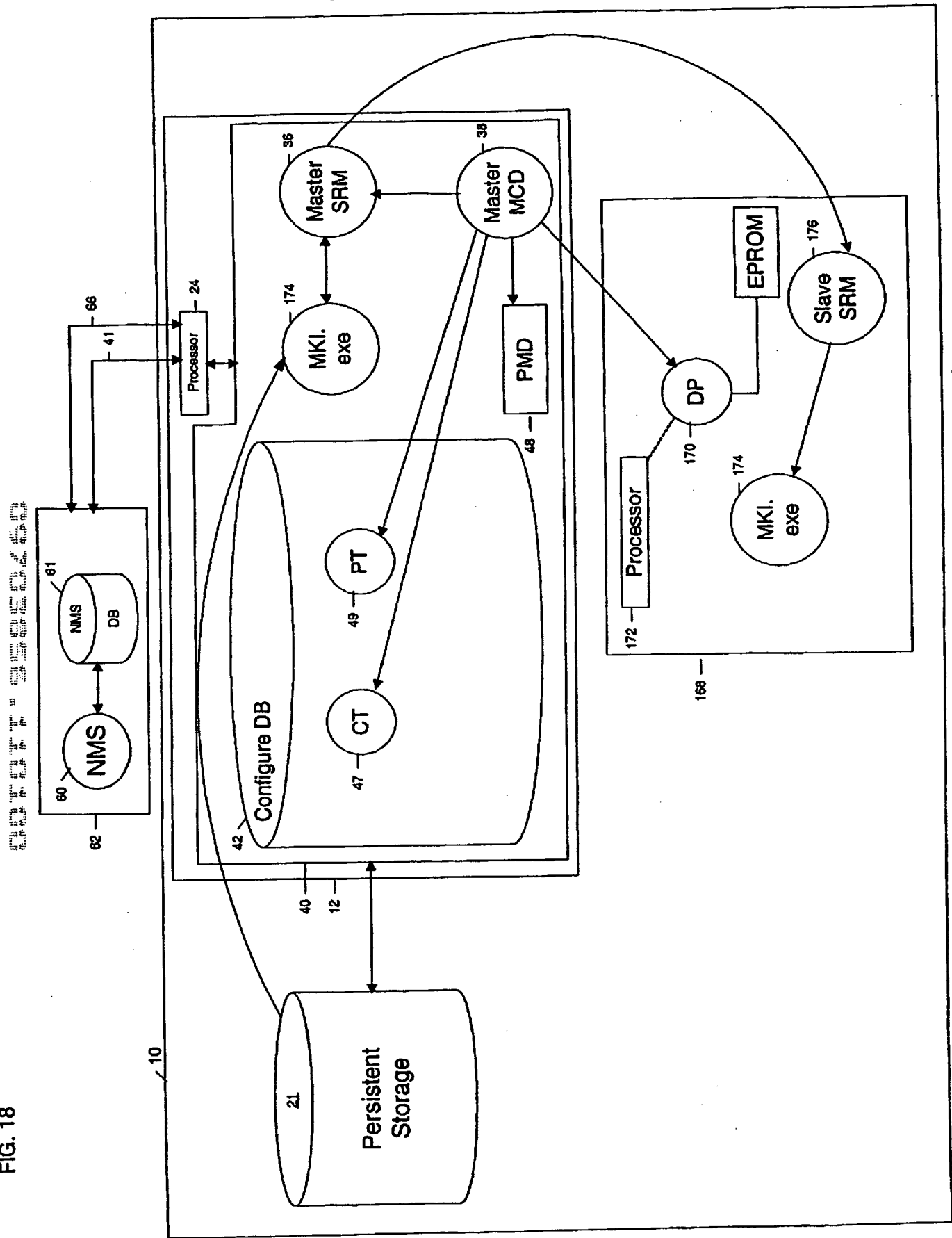


FIG. 19

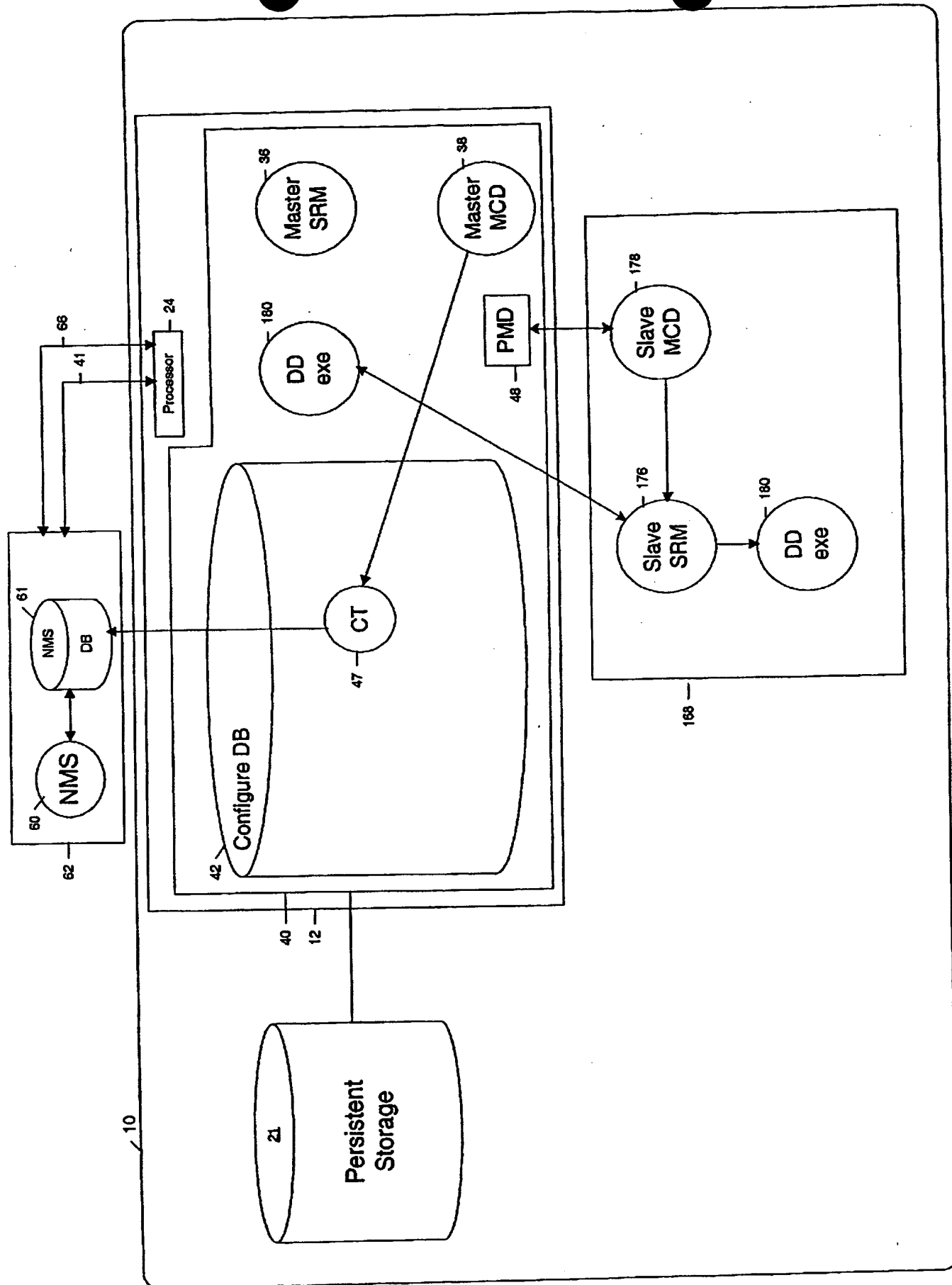


FIG. 20

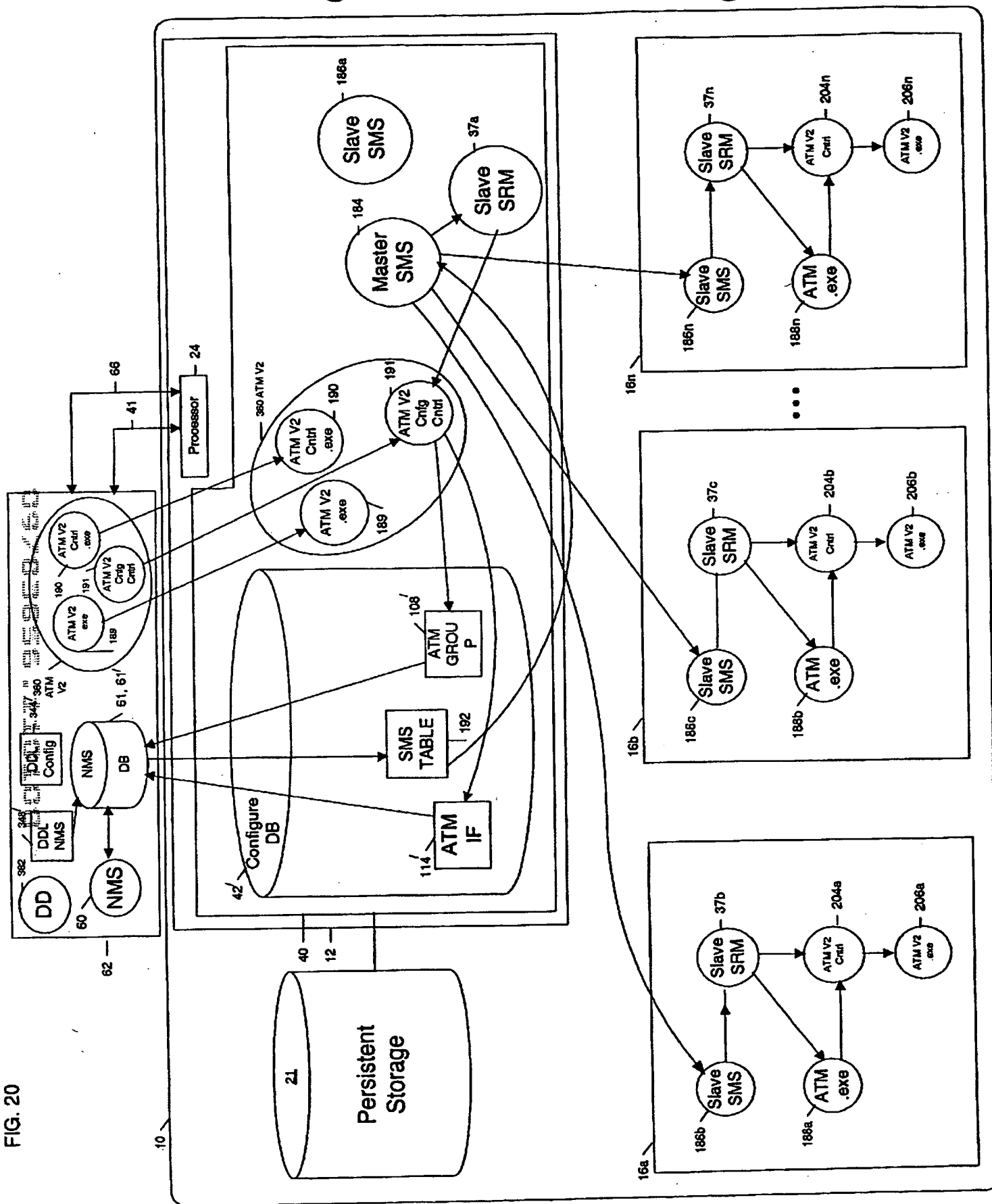


FIG. 21

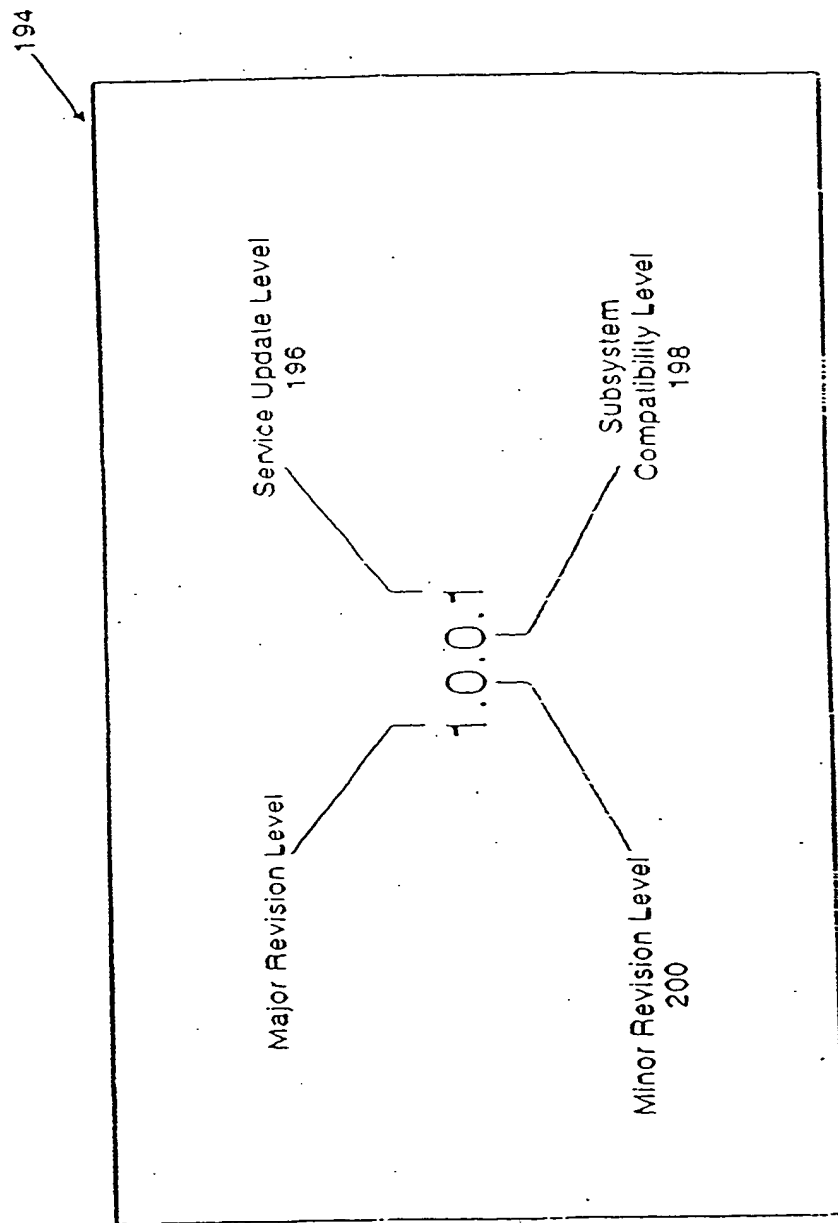


FIG. 22

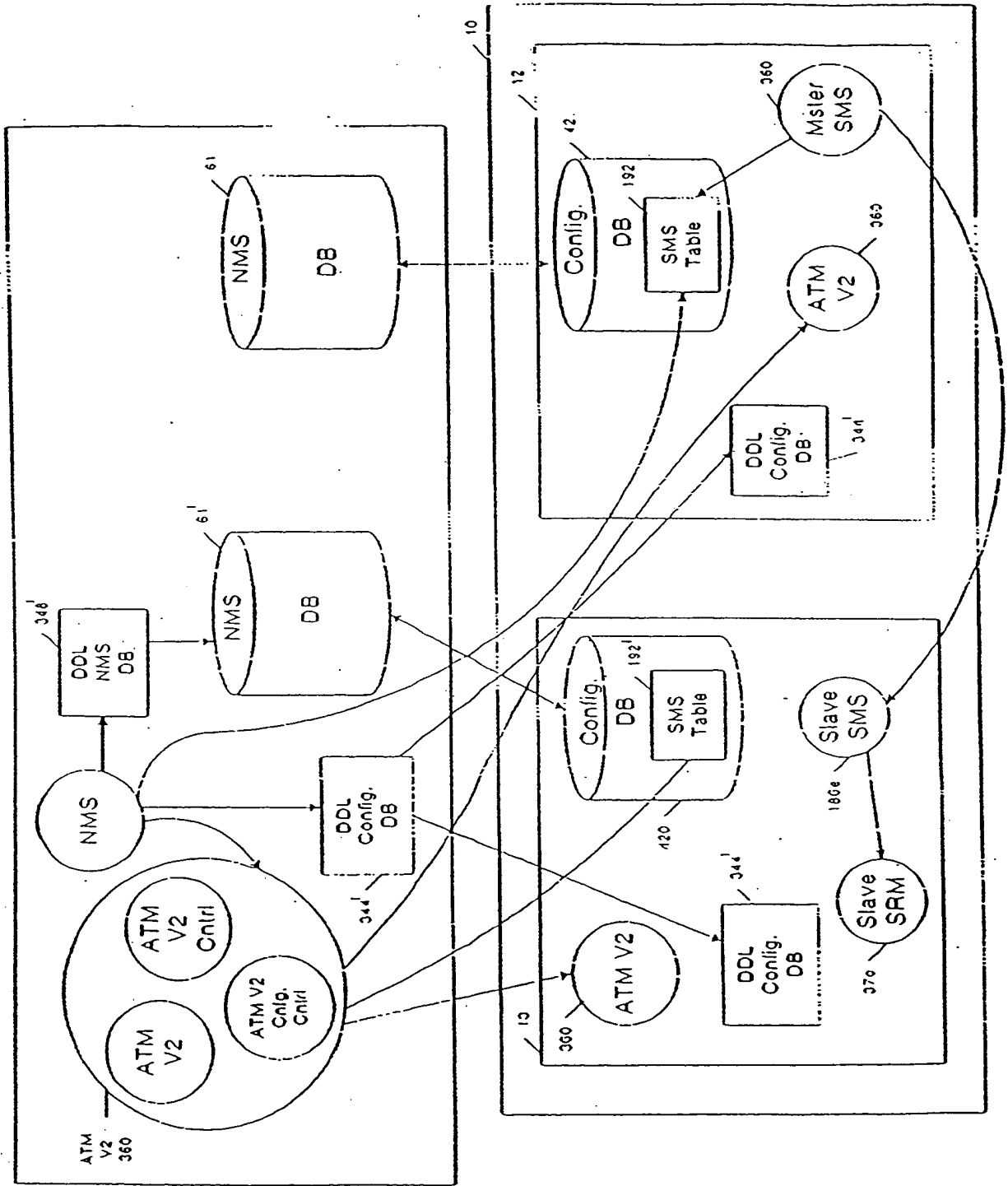


FIG. 23

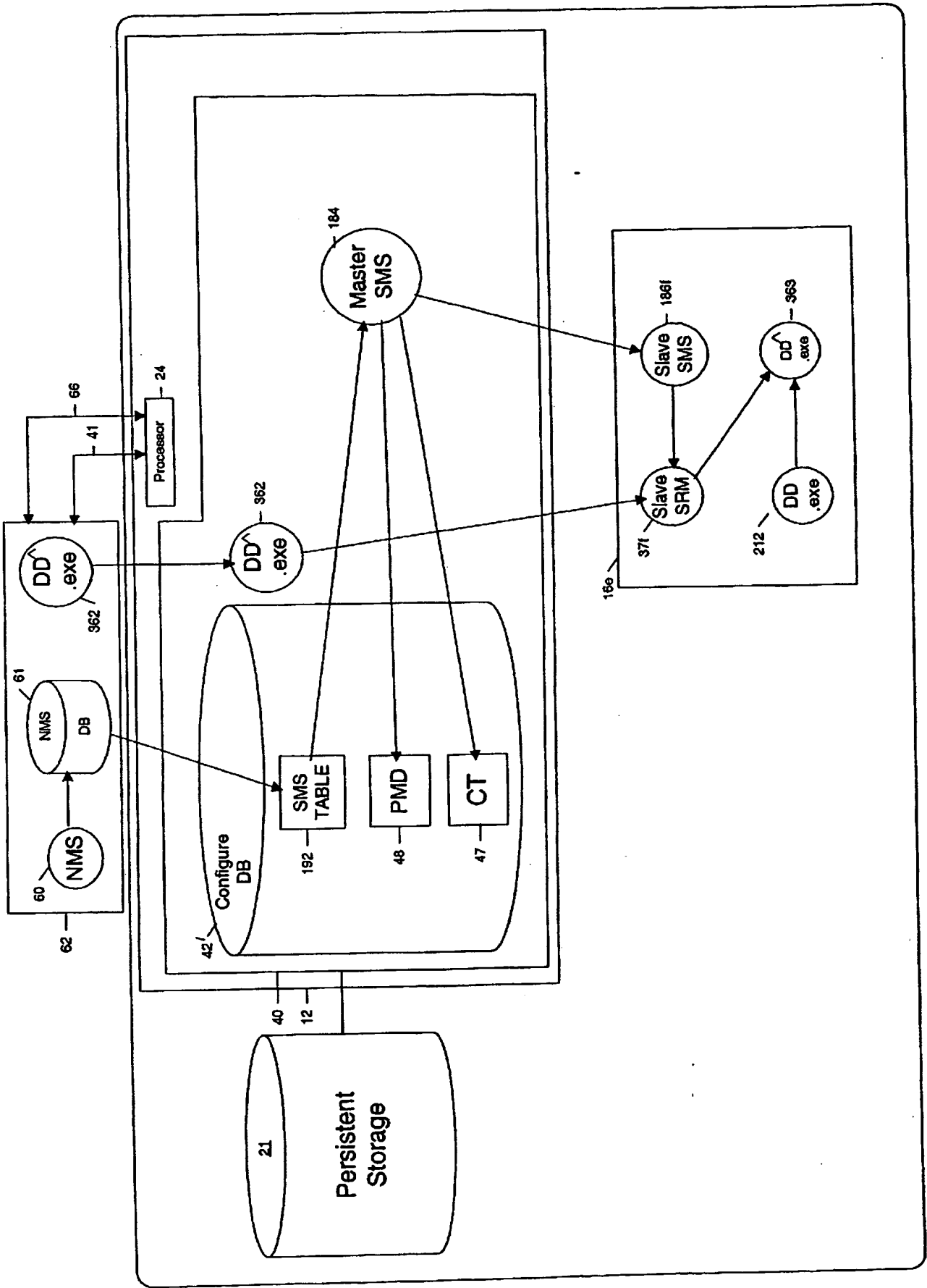


FIG. 24

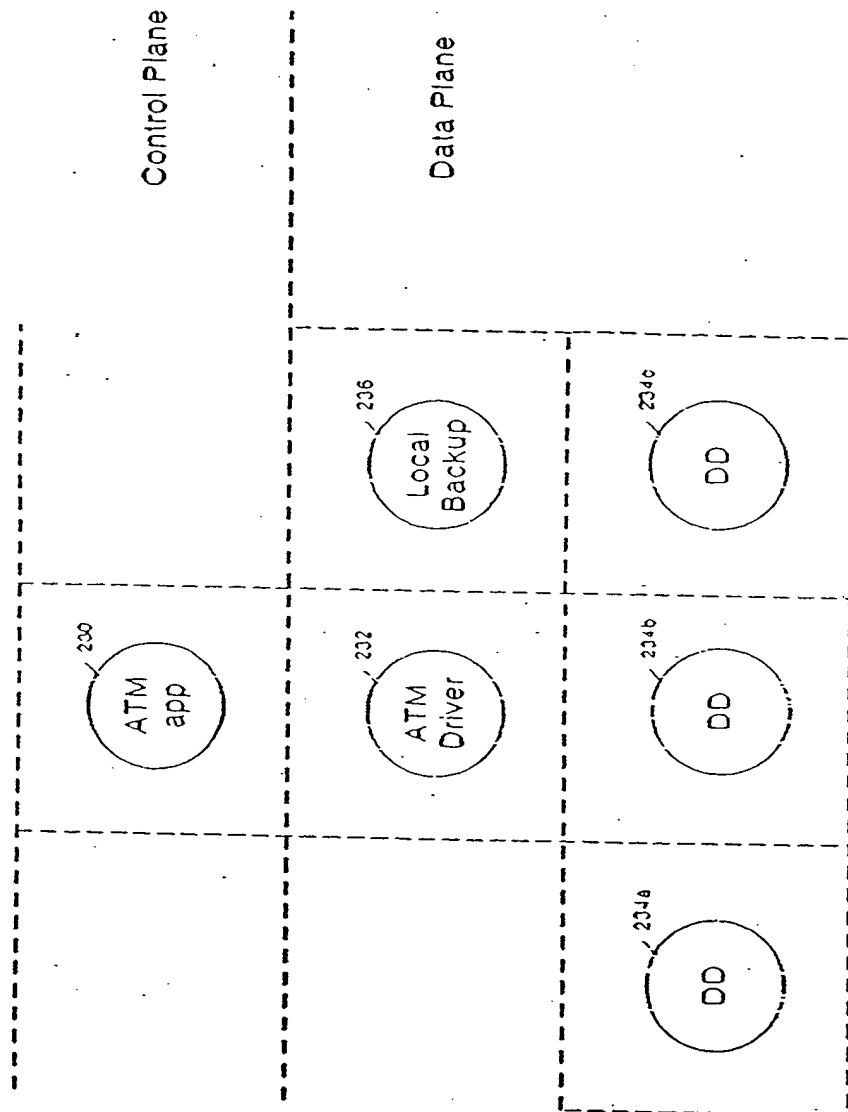


FIG. 25

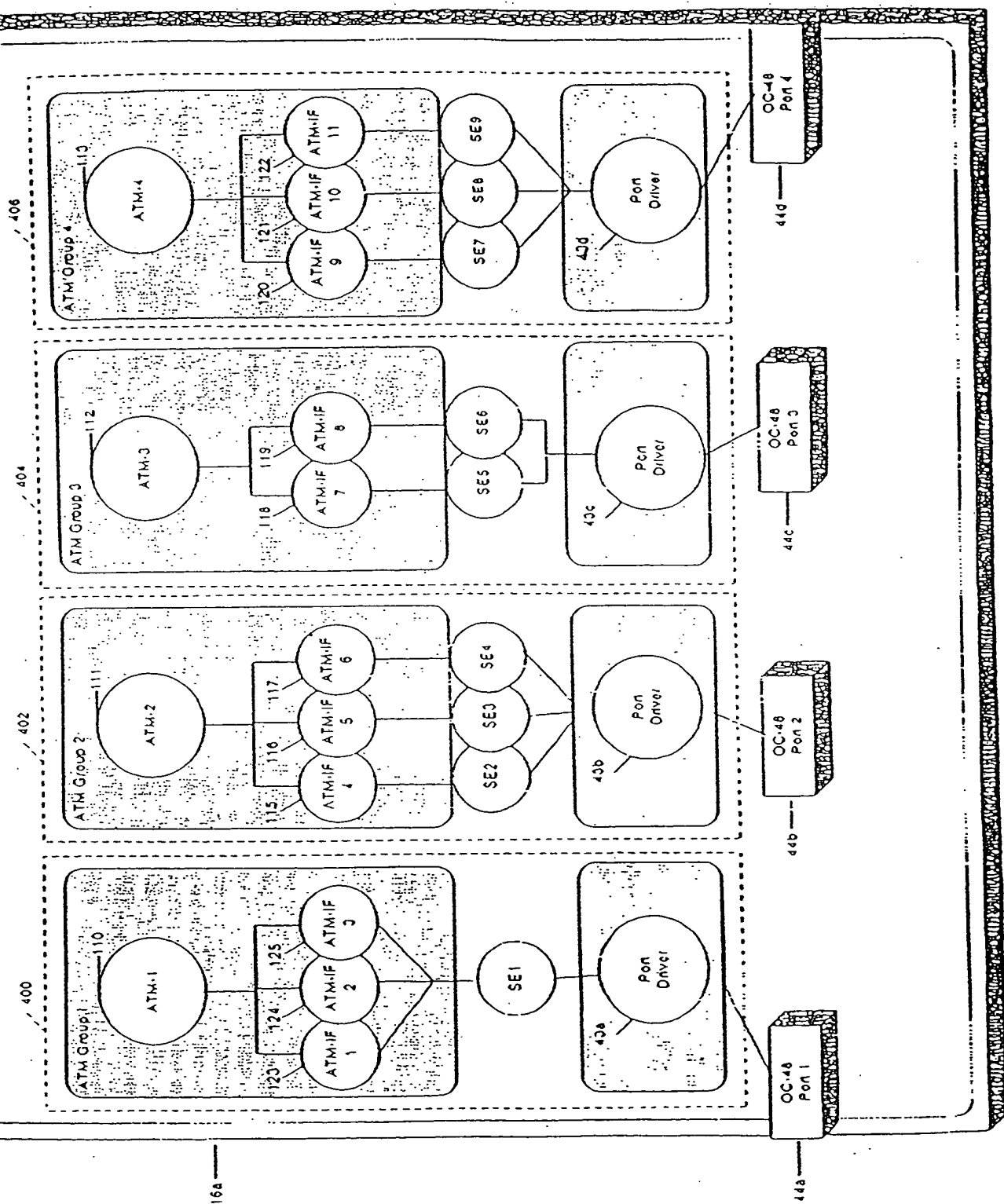
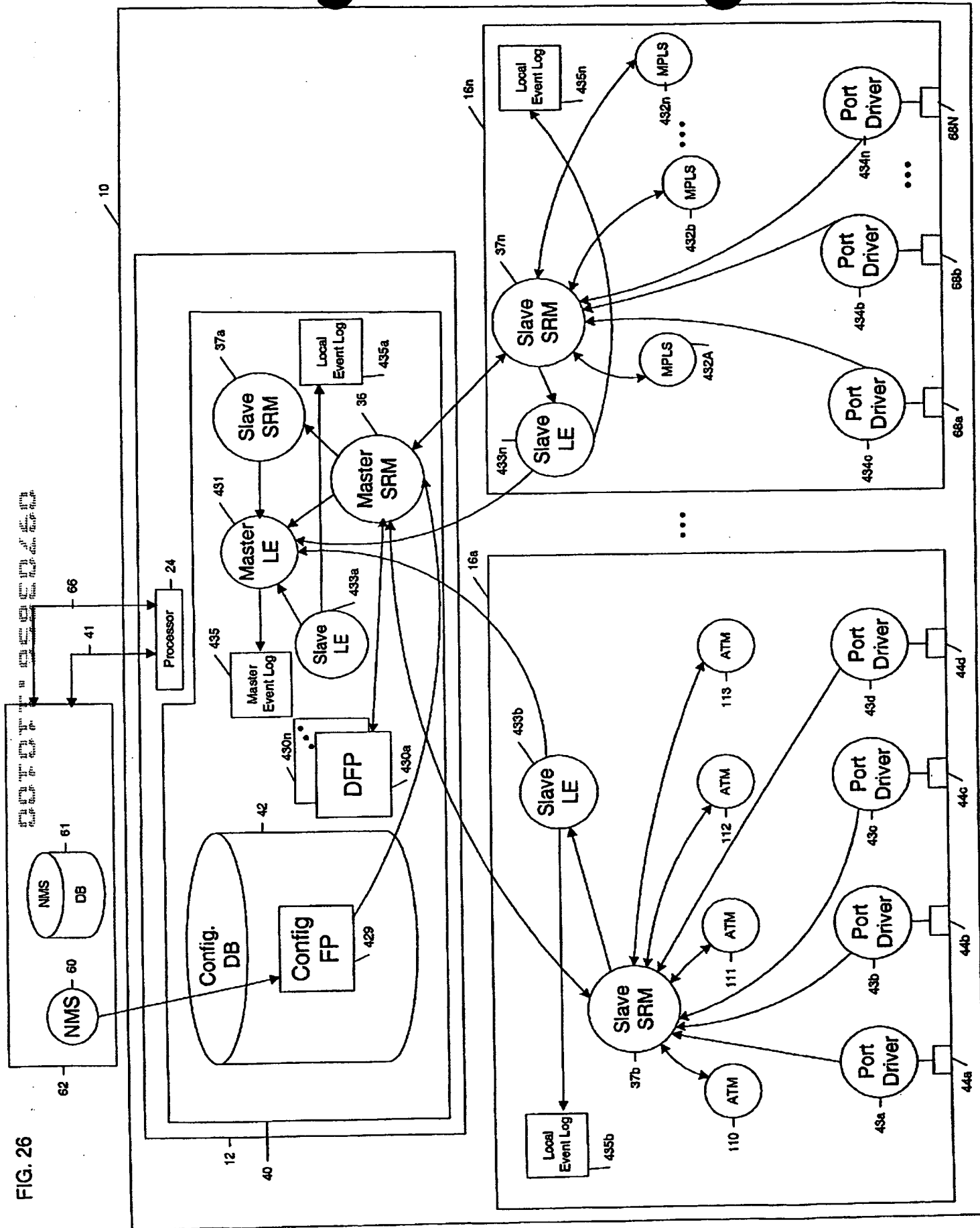




FIG. 26



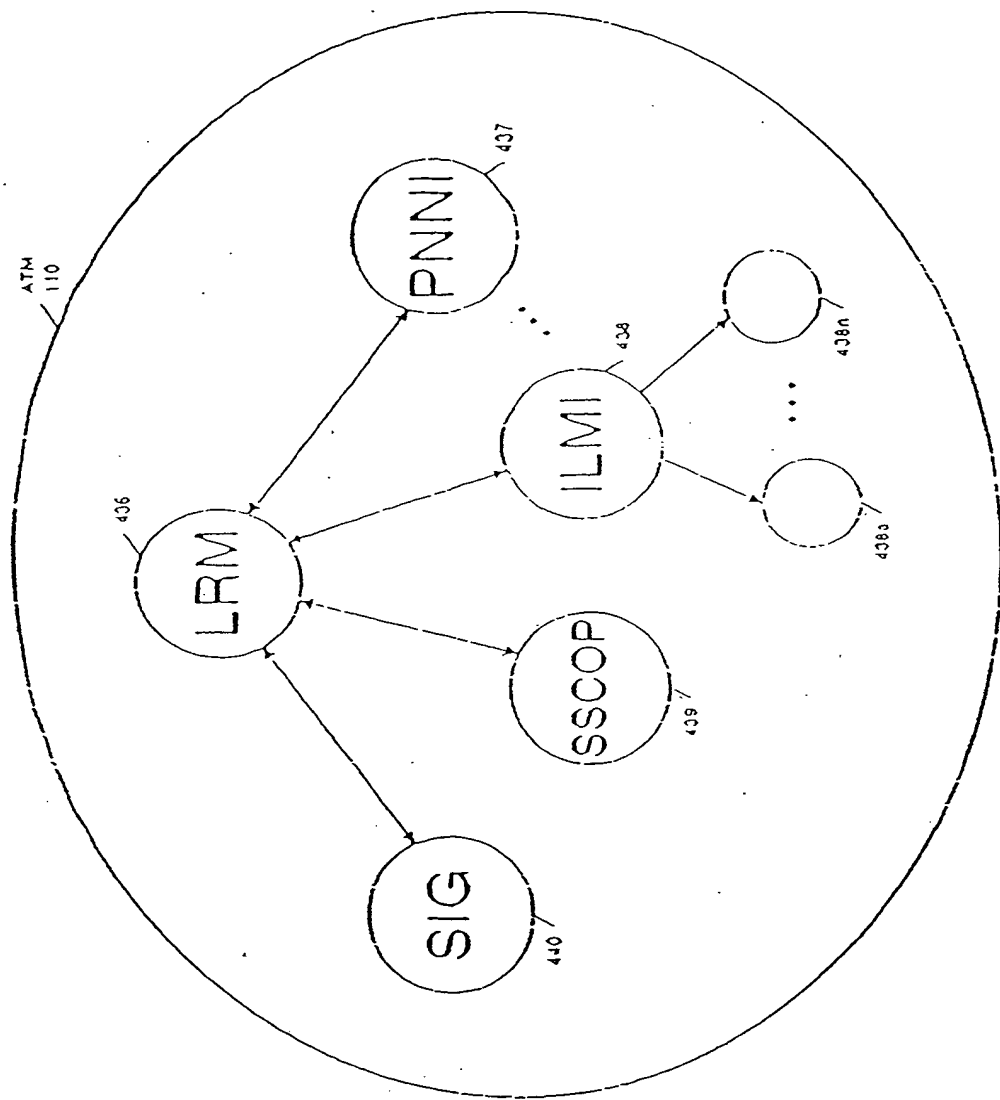


FIG. 28

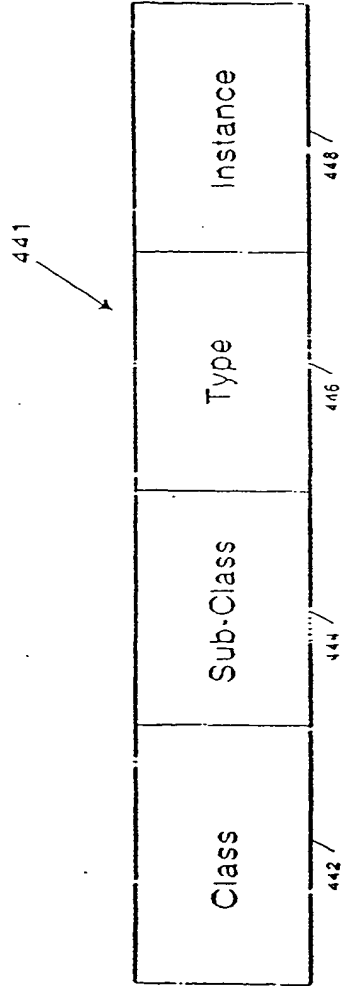
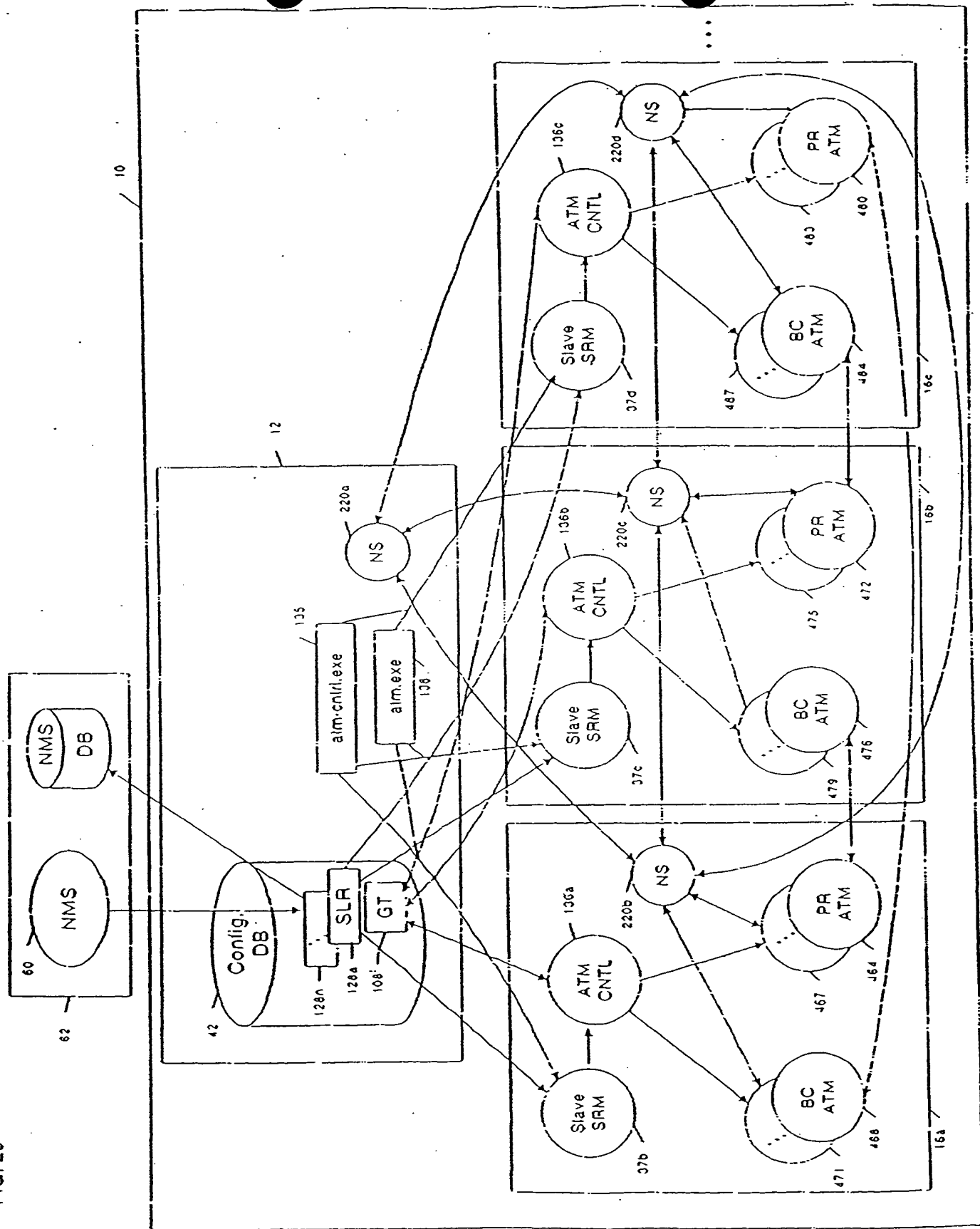


FIG. 29



Group Table 108

|     | Group<br># | Primary<br>Card LID | Backup<br>Card<br>LID | ... |
|-----|------------|---------------------|-----------------------|-----|
| 450 | 1          | 30                  | 31                    |     |
| 451 | 2          | 30                  | 31                    |     |
| 452 | 3          | 30                  | 31                    |     |
| 453 | 4          | 30                  | 31                    |     |
| 454 | 5          | 31                  | 32                    |     |
| 455 | 6          | 31                  | 32                    |     |
| 456 | 7          | 31                  | 32                    |     |
| 457 | 8          | 31                  | 32                    |     |
| 458 | 9          | 32                  | 30                    |     |
| 459 | 10         | 32                  | 30                    |     |
| 460 | 11         | 32                  | 30                    |     |
| 461 | 12         | 32                  | 30                    |     |
|     | ⋮          | ⋮                   | ⋮                     | ⋮   |

Fig. 31a

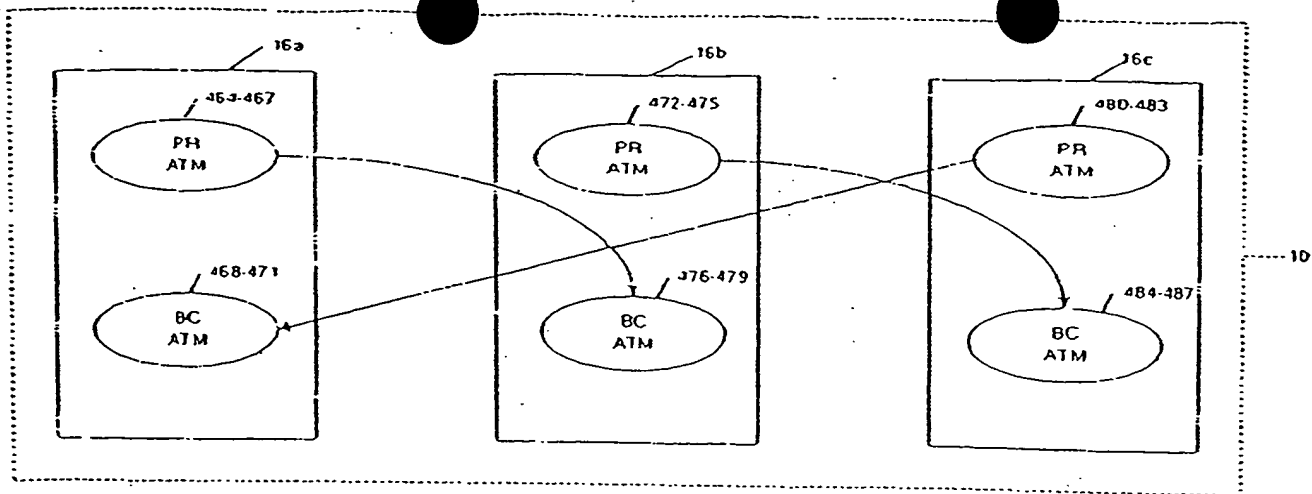


Fig. 31b

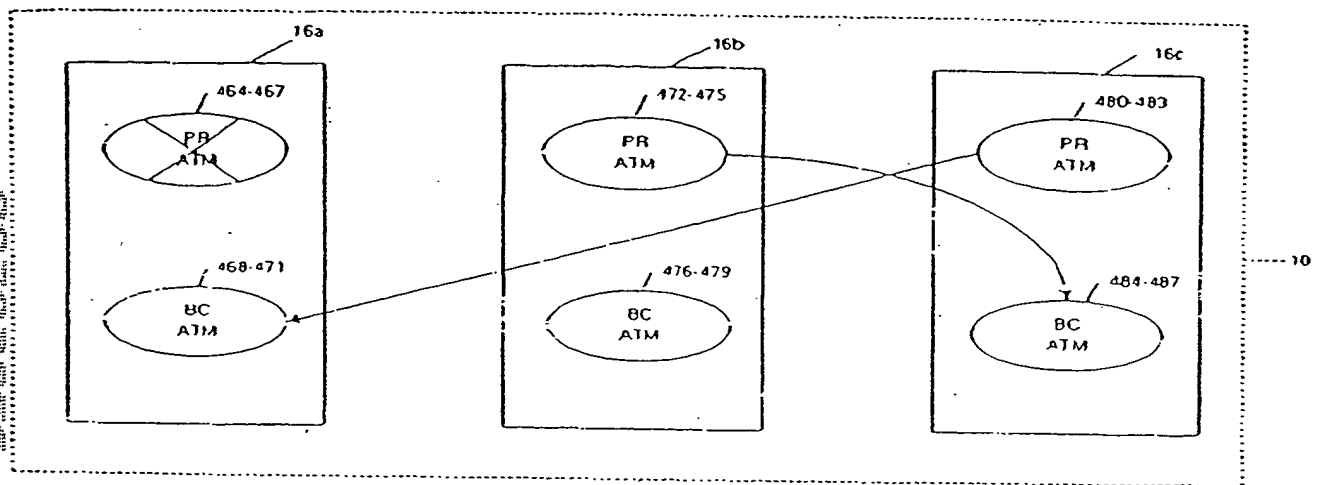


Fig. 31c

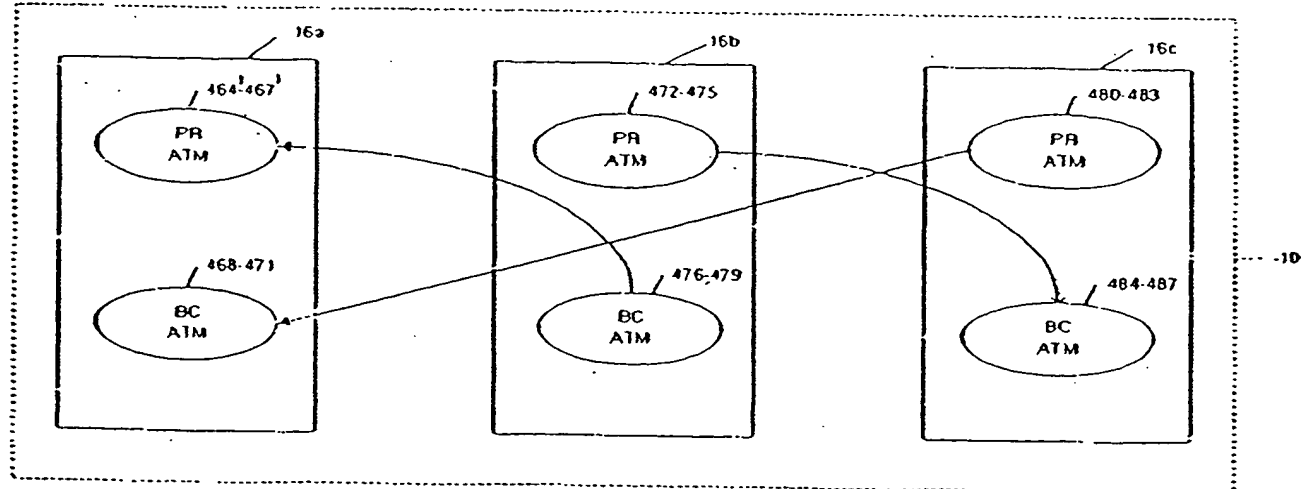


Fig. 32a

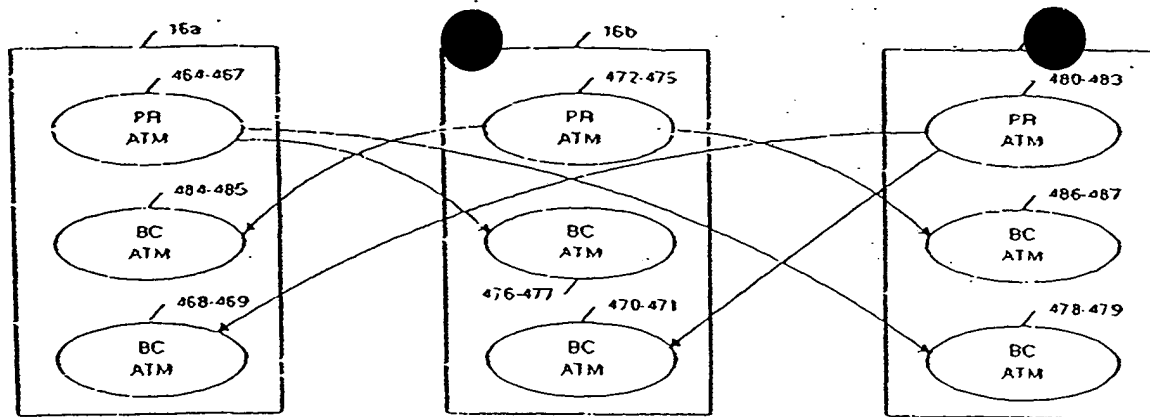


Fig. 32A

Fig. 32b

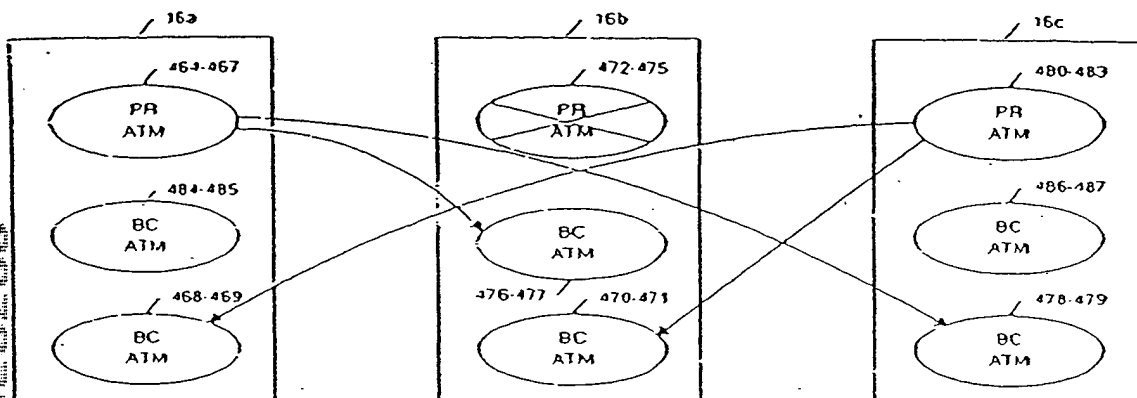


Fig. 32c

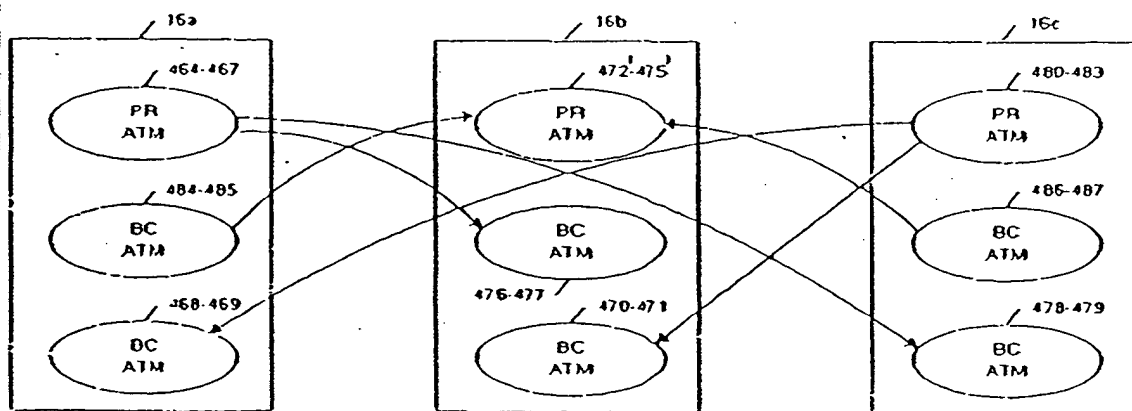


FIG. 33a

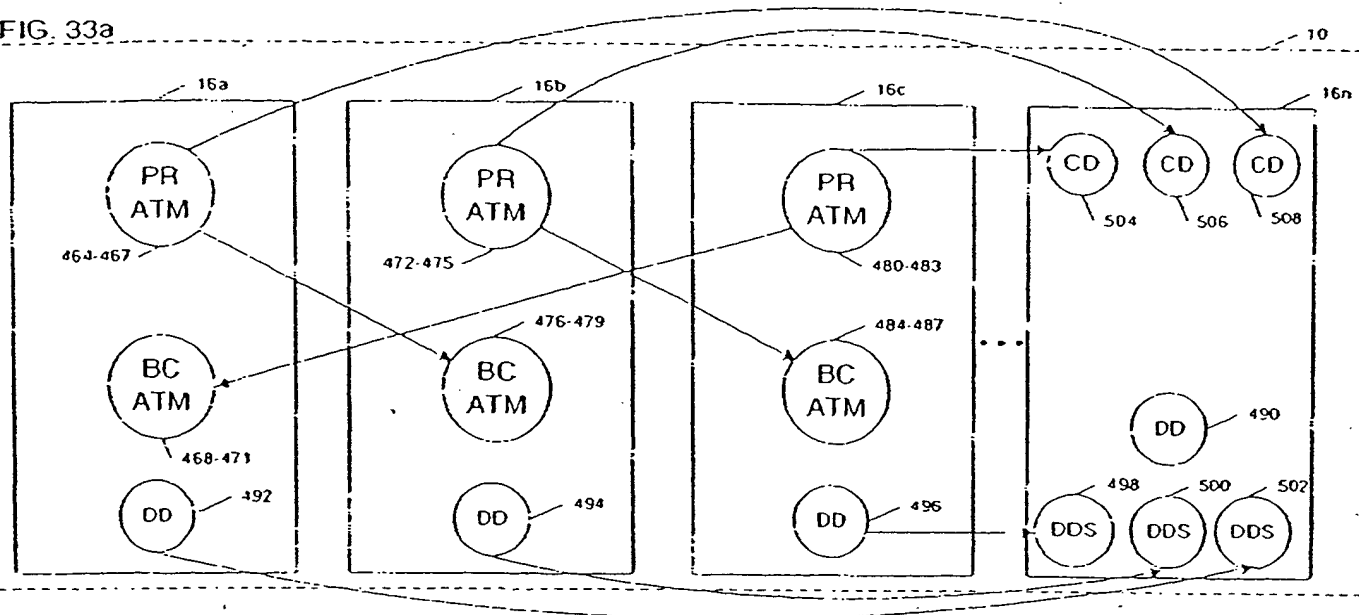


FIG. 33b

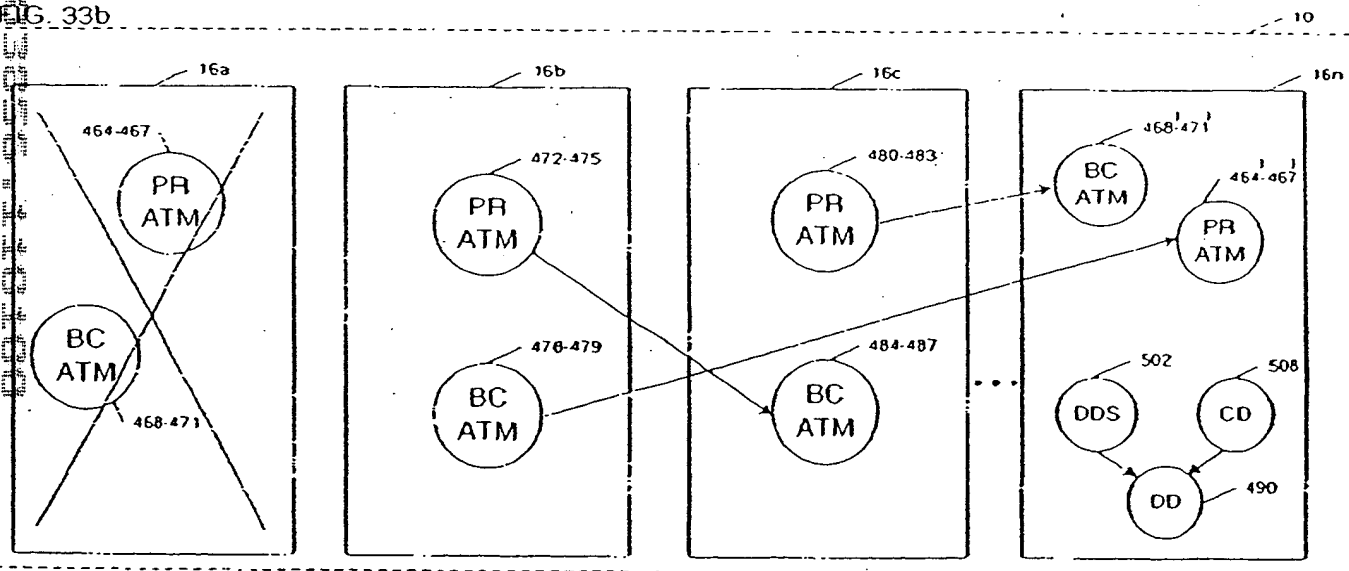




FIG. 33c

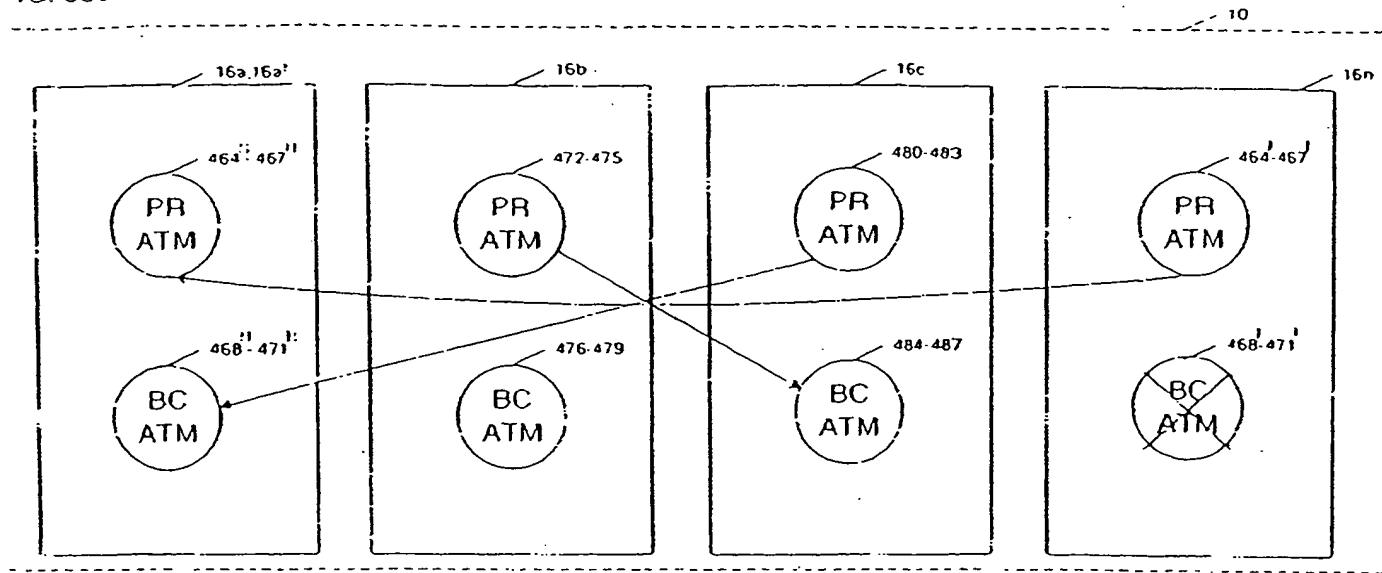


FIG. 33d

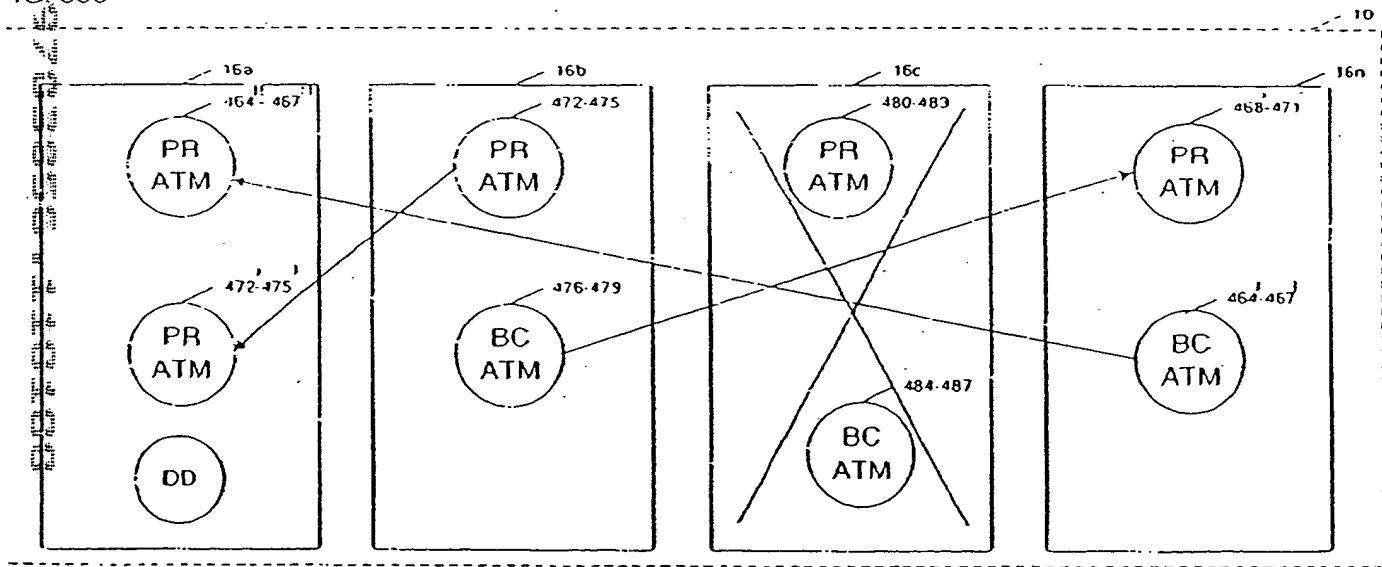


Fig. 34a

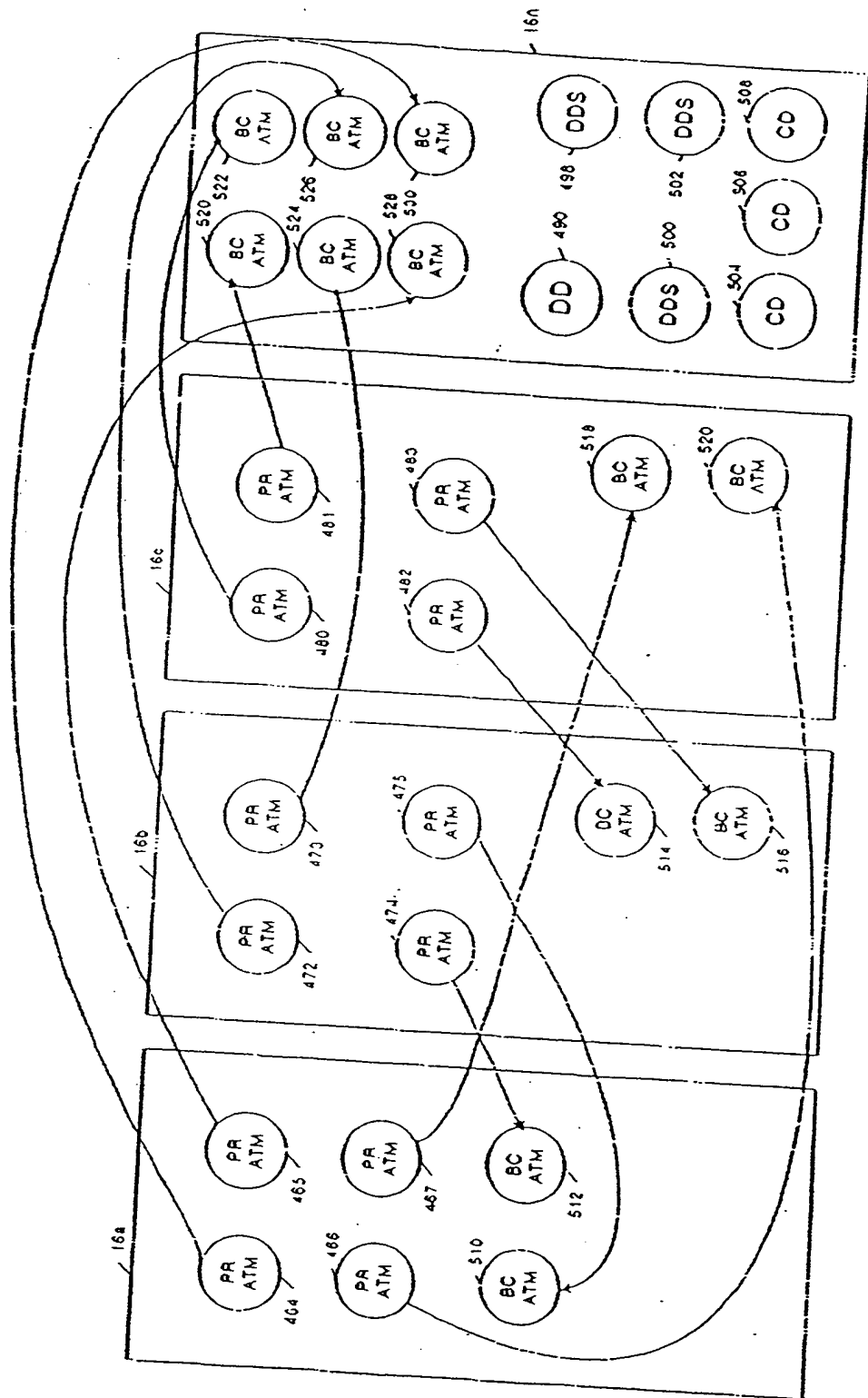


FIG. 34b

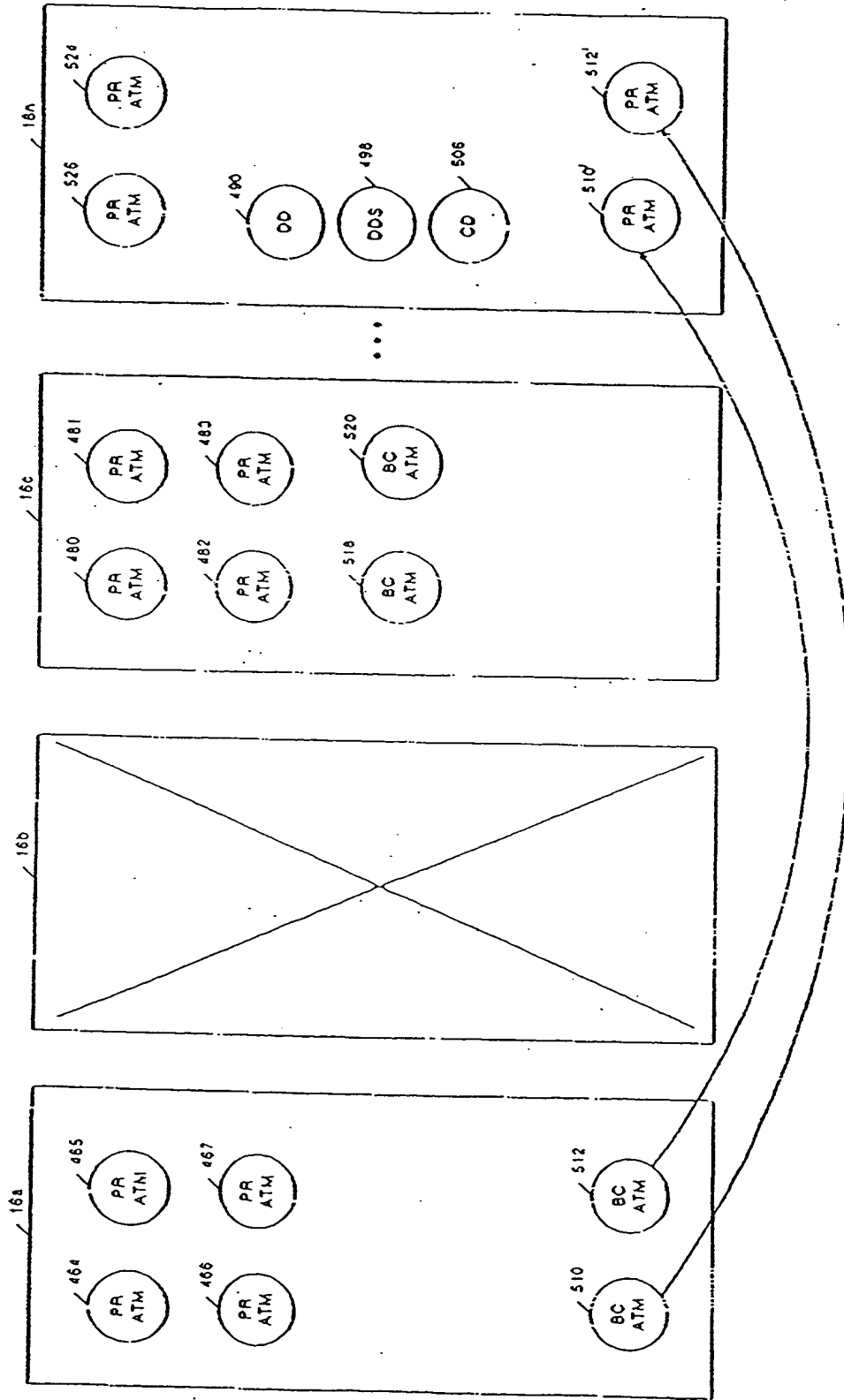
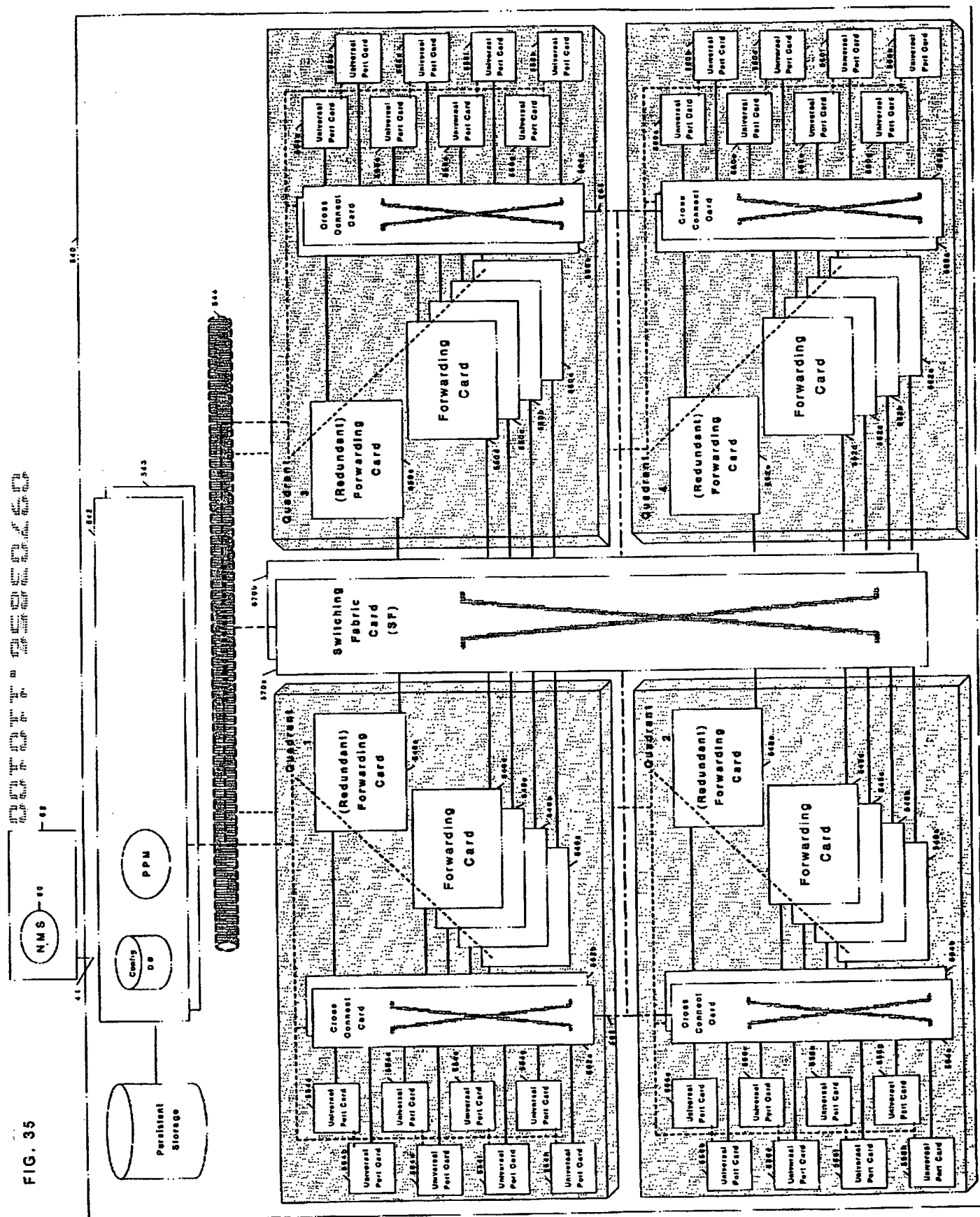


FIG. 35



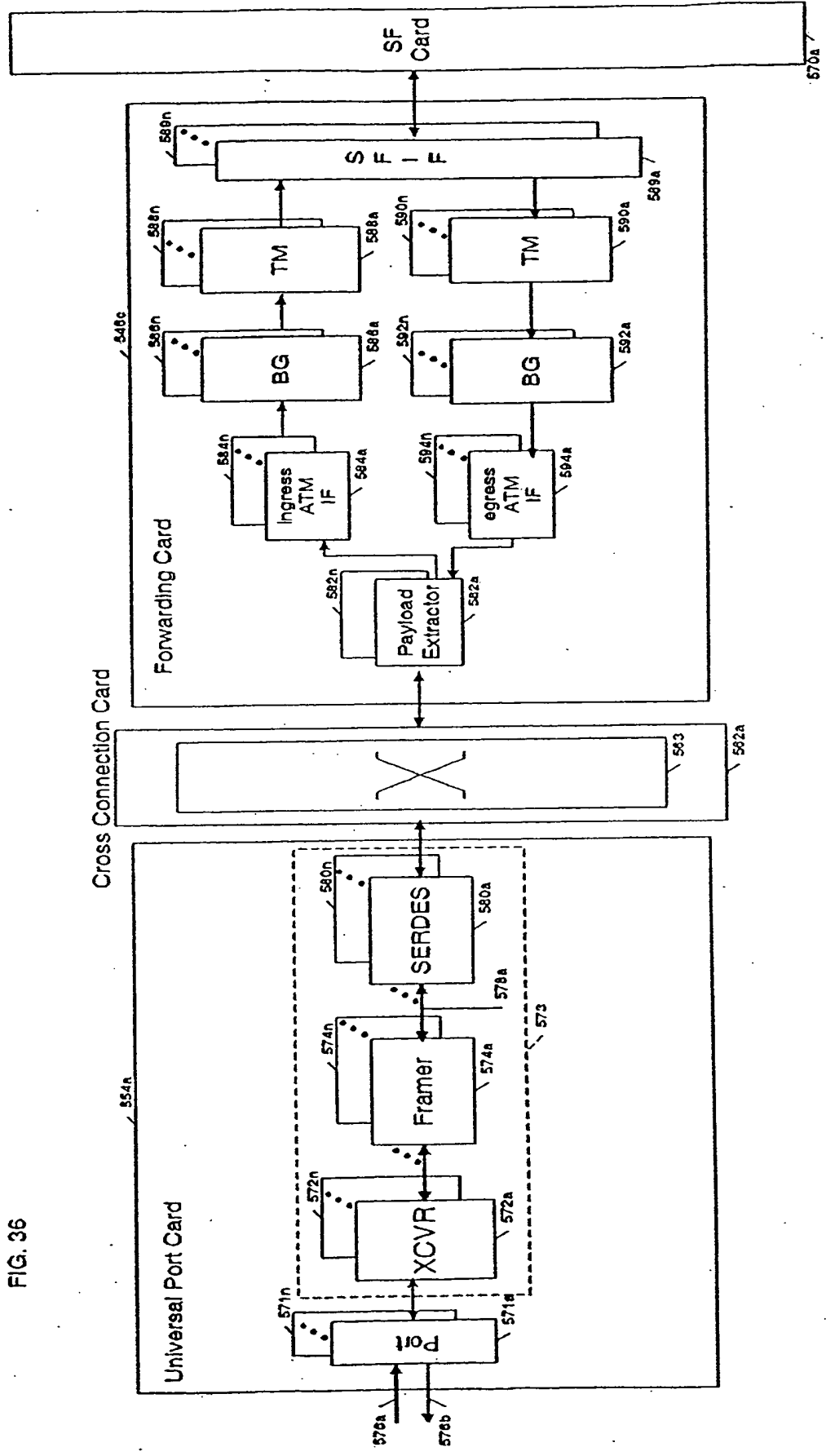


FIG. 36

FIG. 37

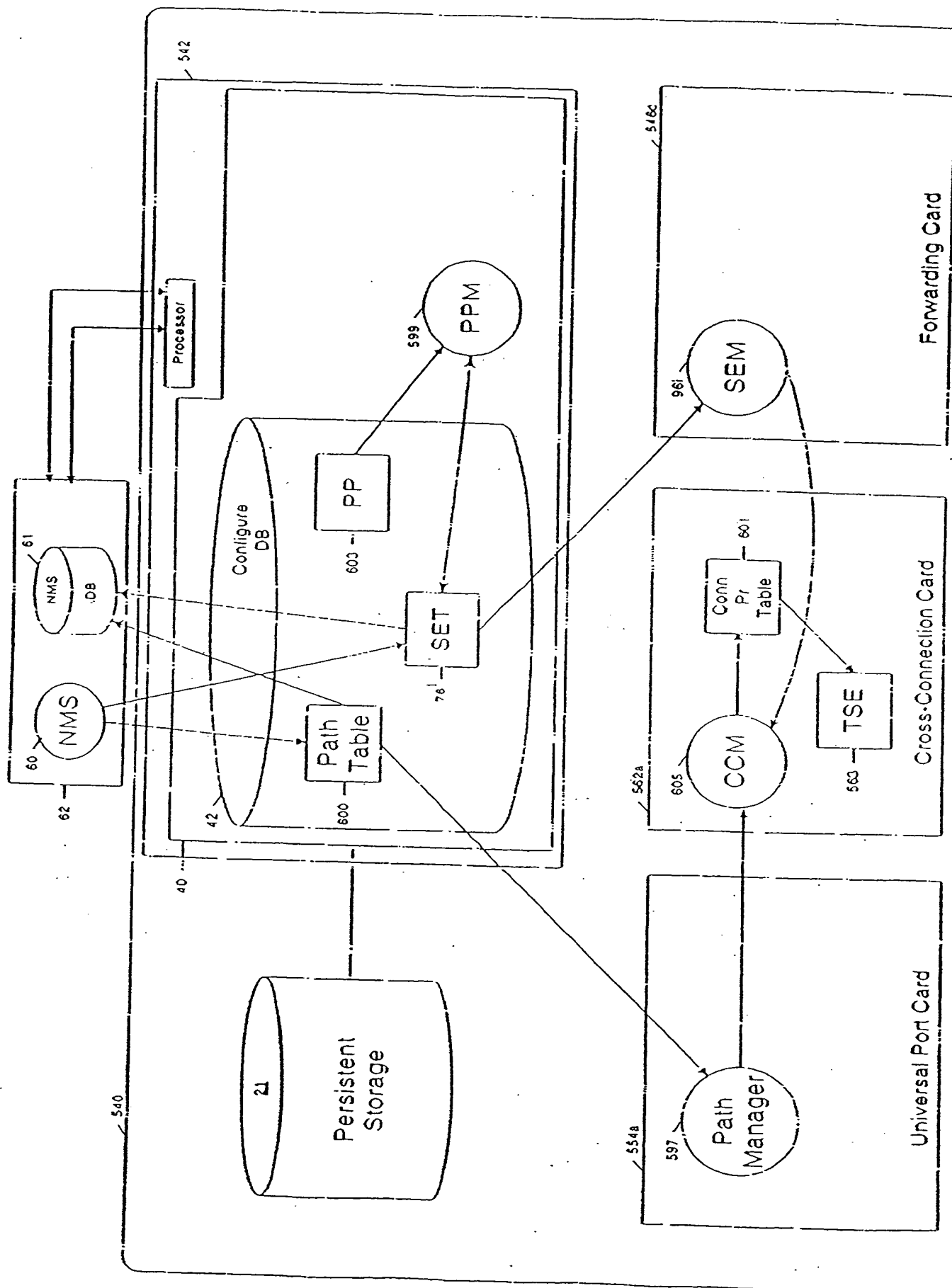


FIG. 38

Path Table 600

602

| Path LID | UP Port LID | Time Slot | # of Time Slots | ... |
|----------|-------------|-----------|-----------------|-----|
| 1666     | 1231        | 4         | 3               |     |
| ⋮        | ⋮           | ⋮         | ⋮               | ⋮   |
| ⋮        | ⋮           | ⋮         | ⋮               | ⋮   |

Service End Point Table 76'

| SE # | Q # | FC LID | FC Slice | FC Time Slot | Path PID | ... |
|------|-----|--------|----------|--------------|----------|-----|
| 878  | 1   |        |          |              | 1666     |     |
| ⋮    | ⋮   | ⋮      | ⋮        | ⋮            | ⋮        | ⋮   |

FIG. 39



540 →

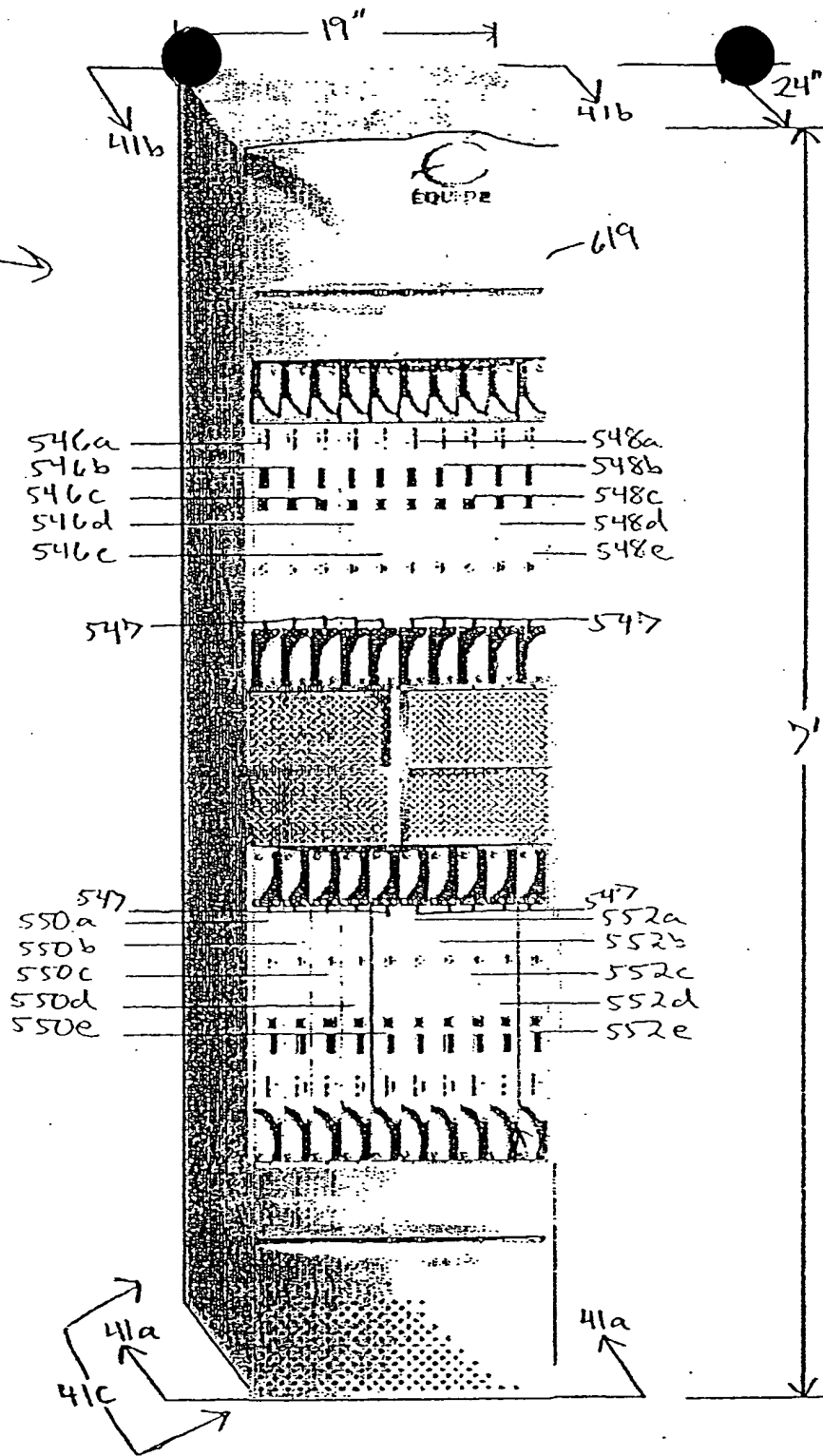


Fig. 40

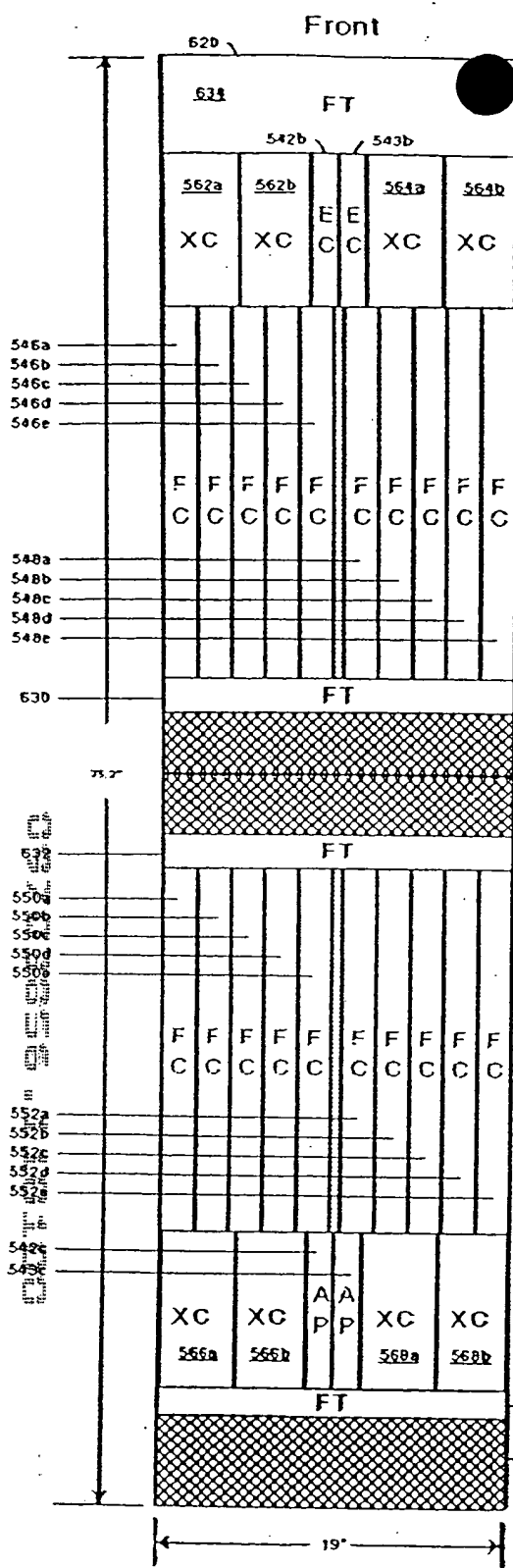


Fig. 41A

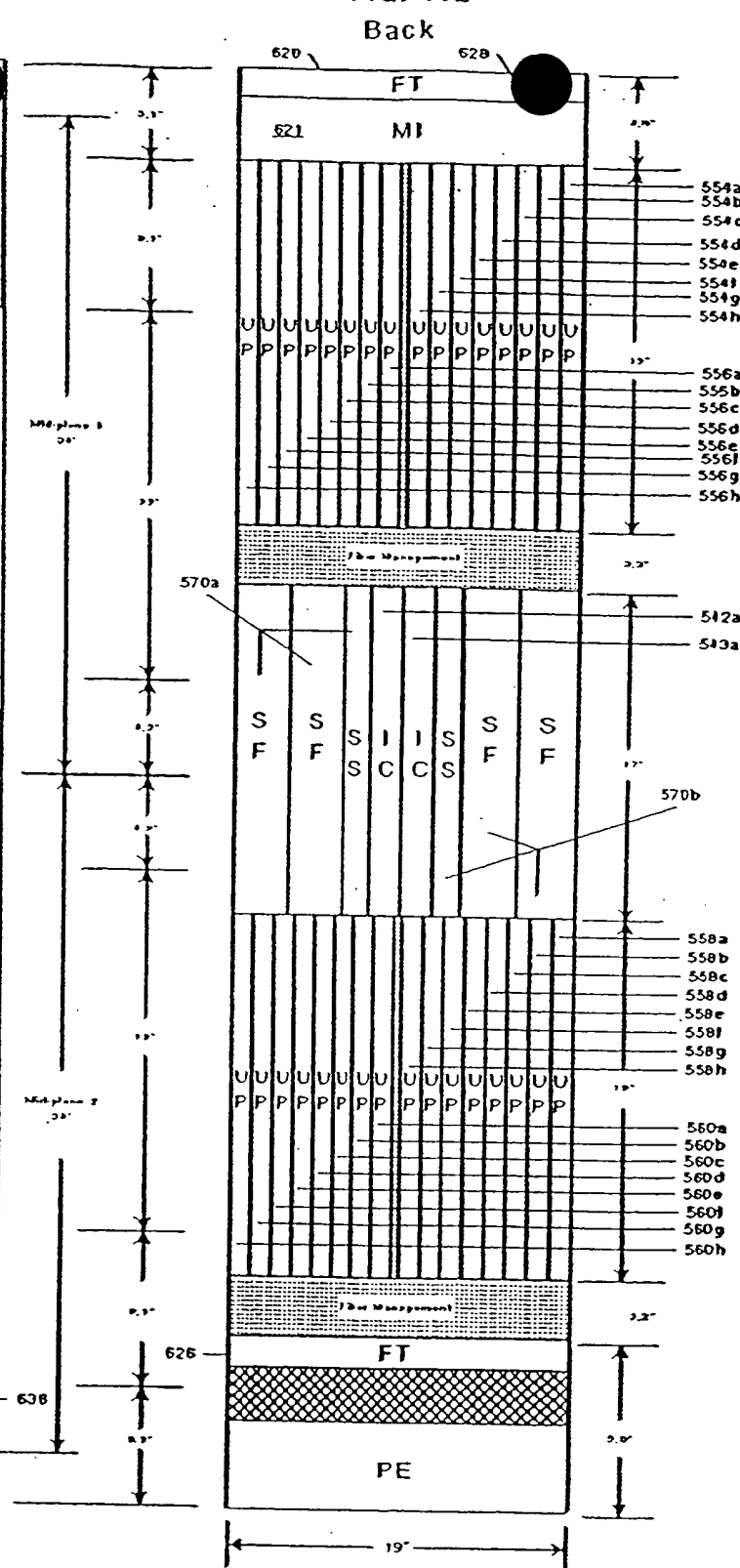


Fig. 41B

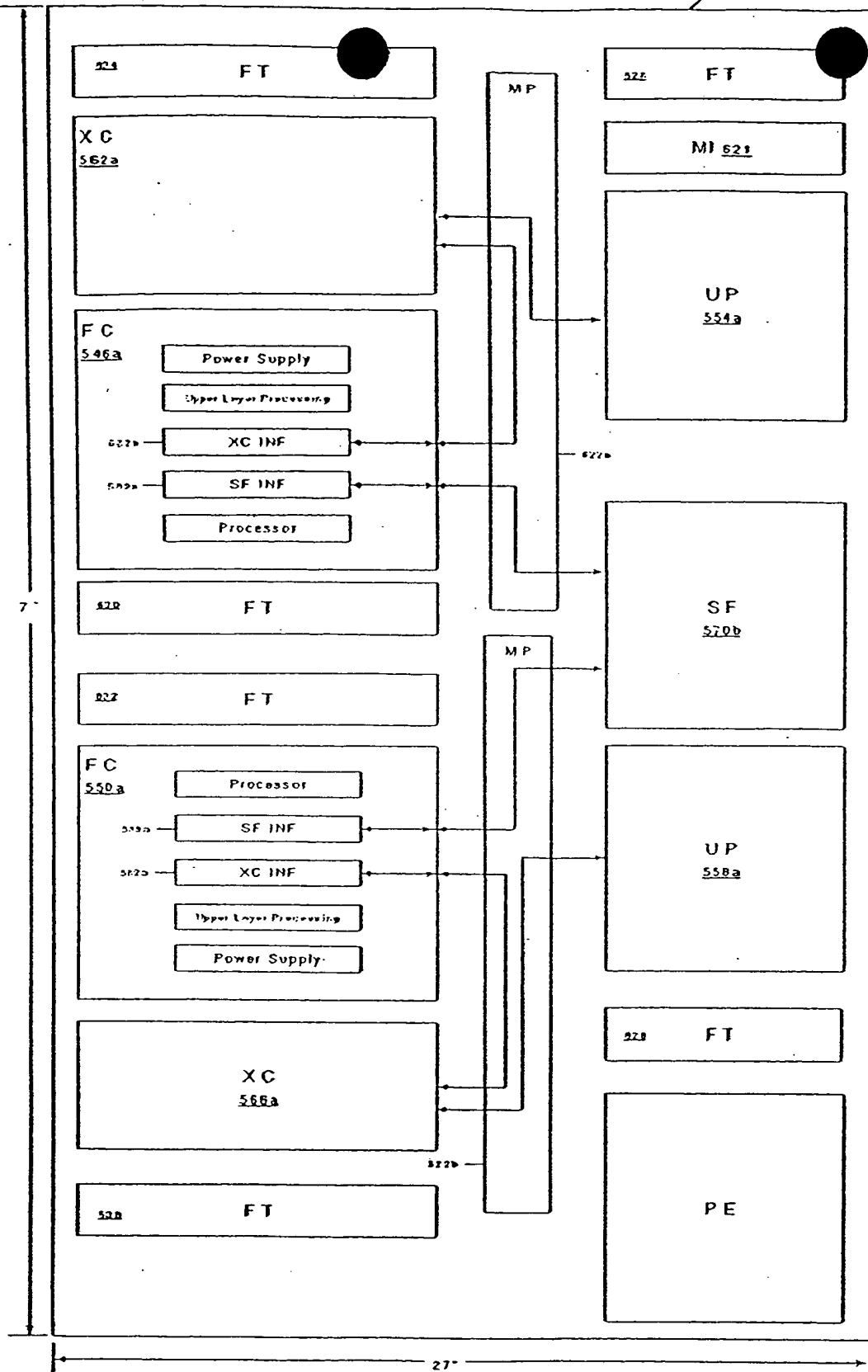


Fig. 41C

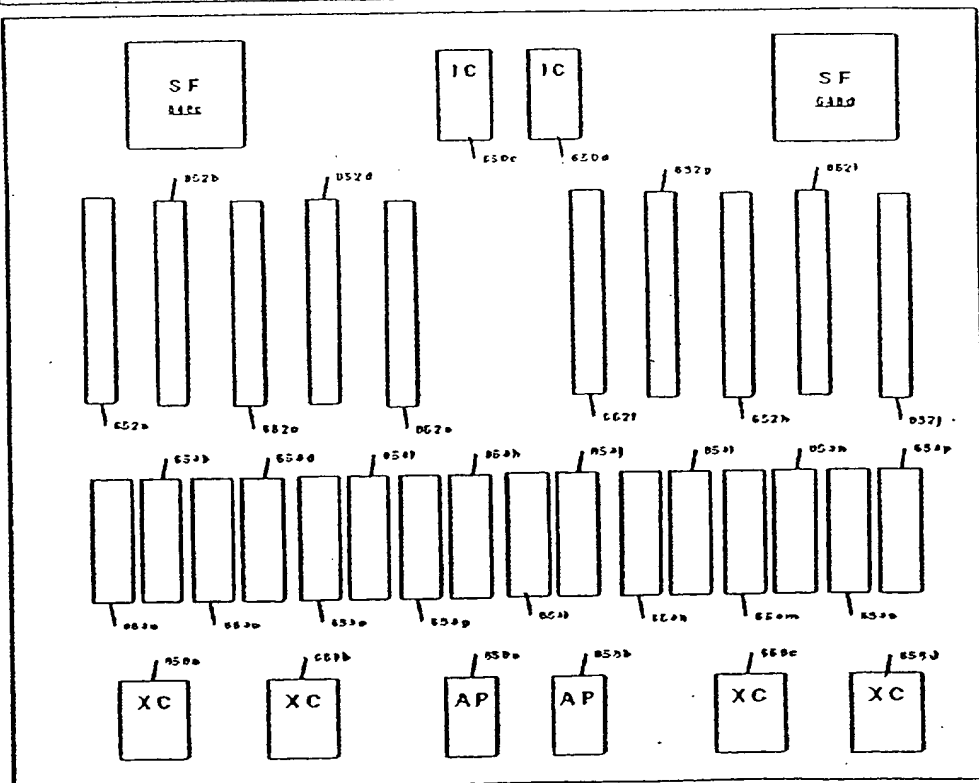
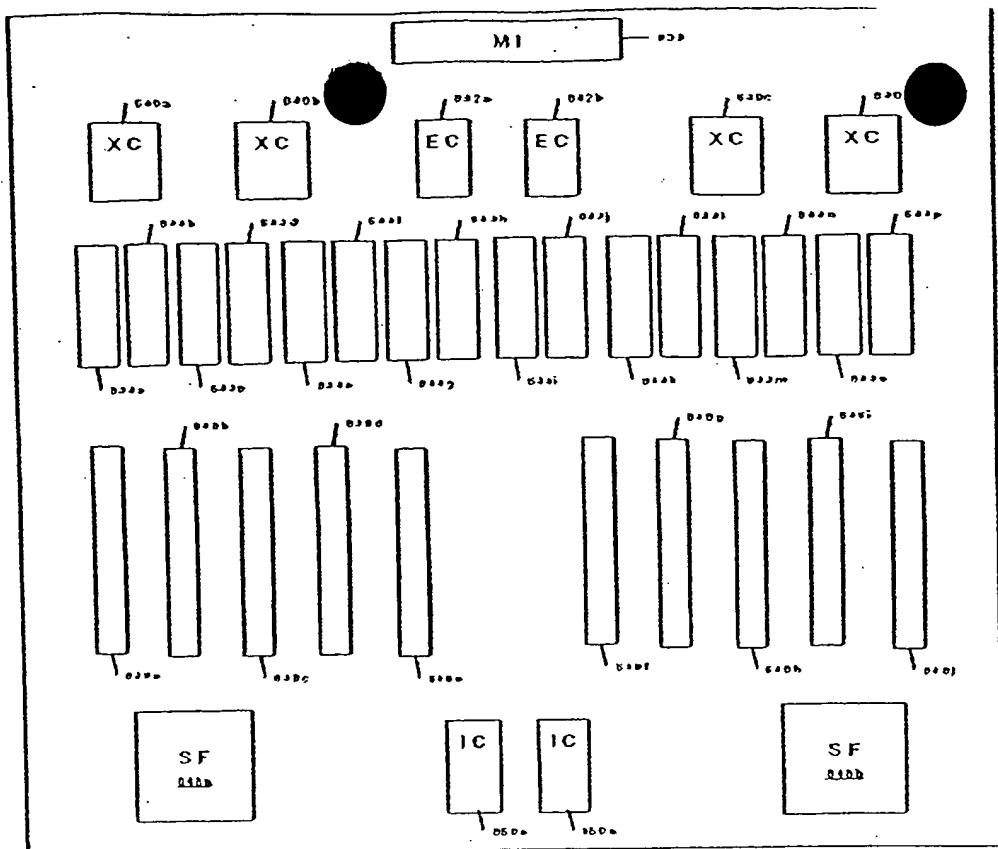
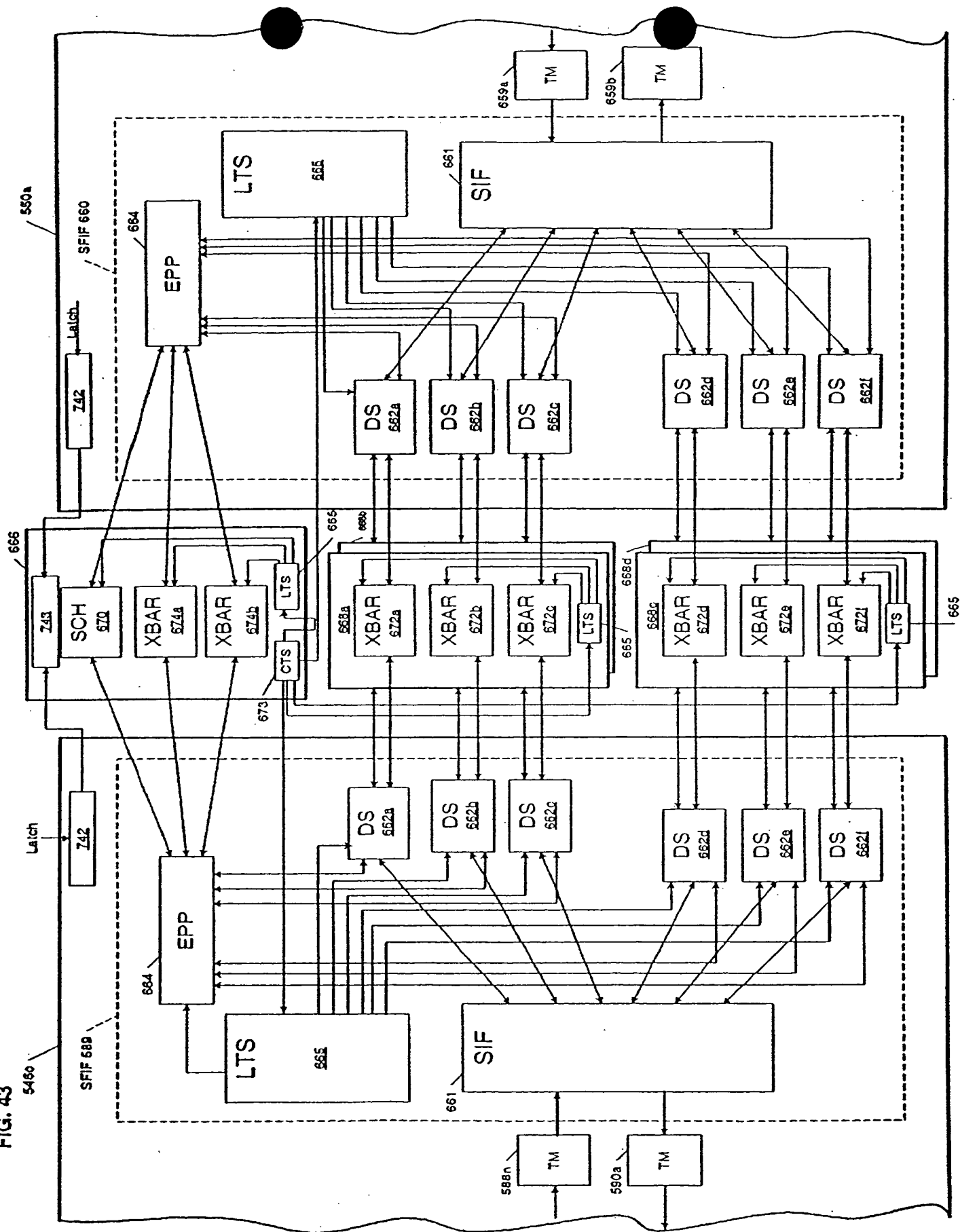


Fig. 42

FIG. 43



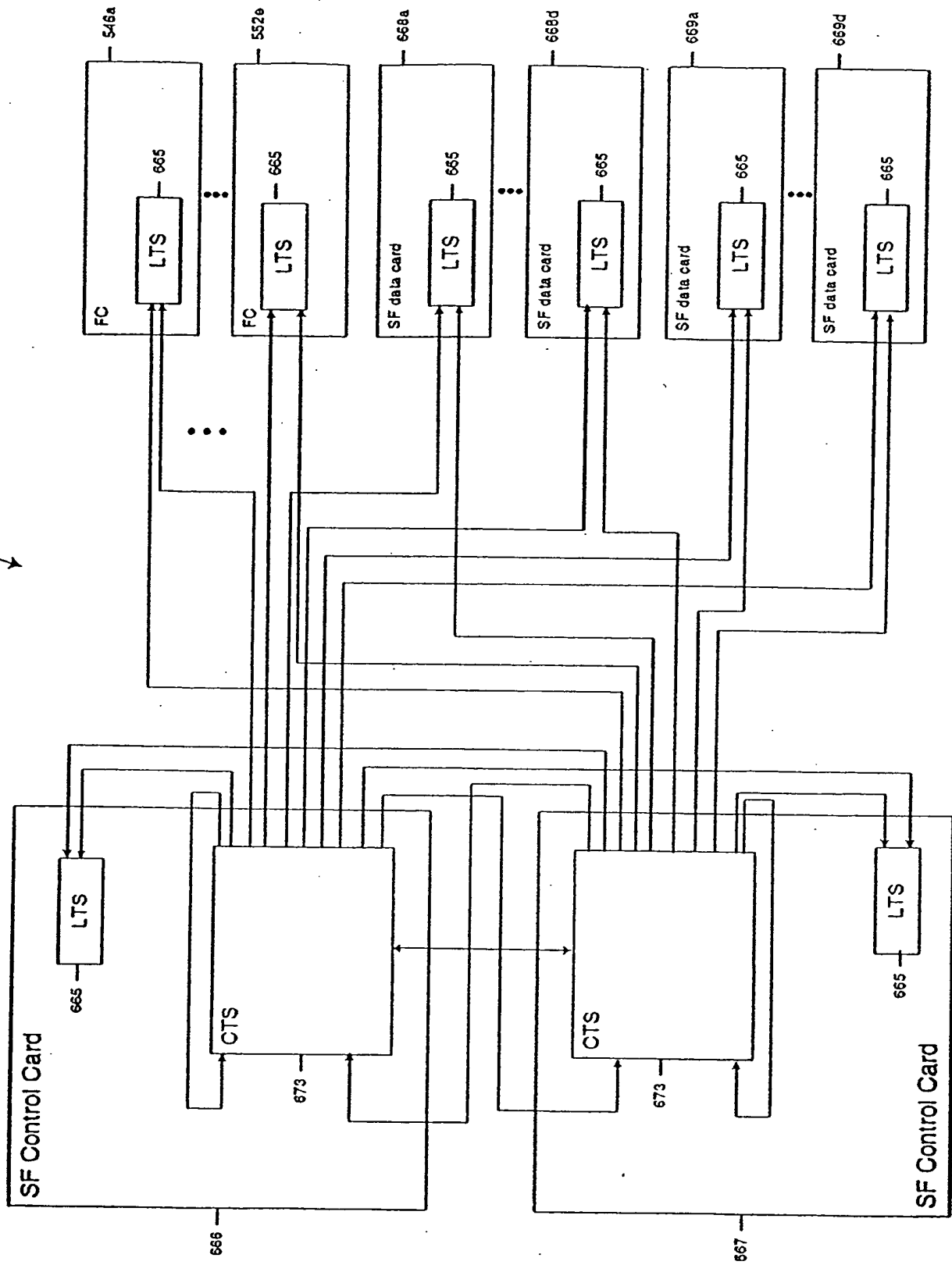
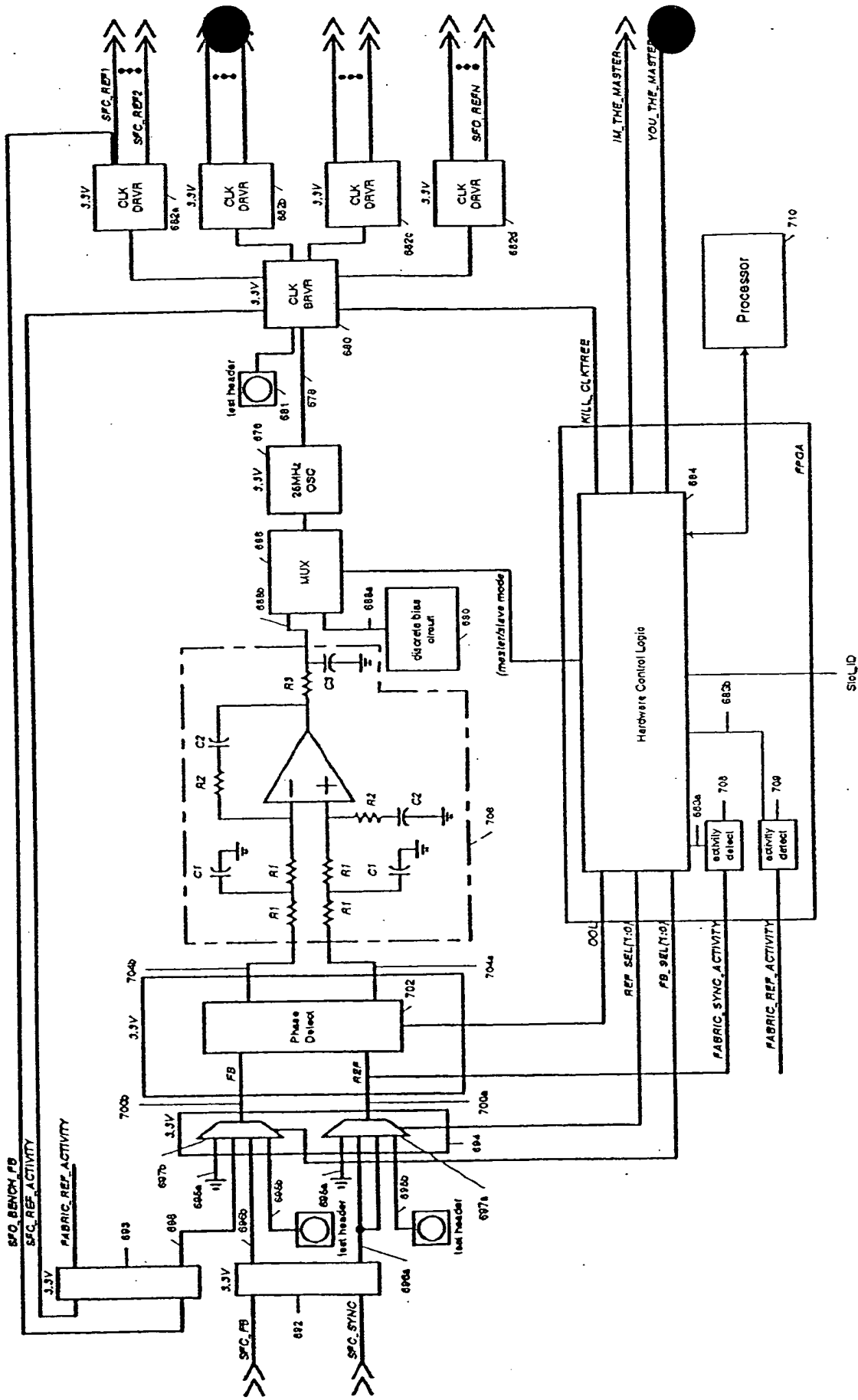


FIG. 44

CTS 673



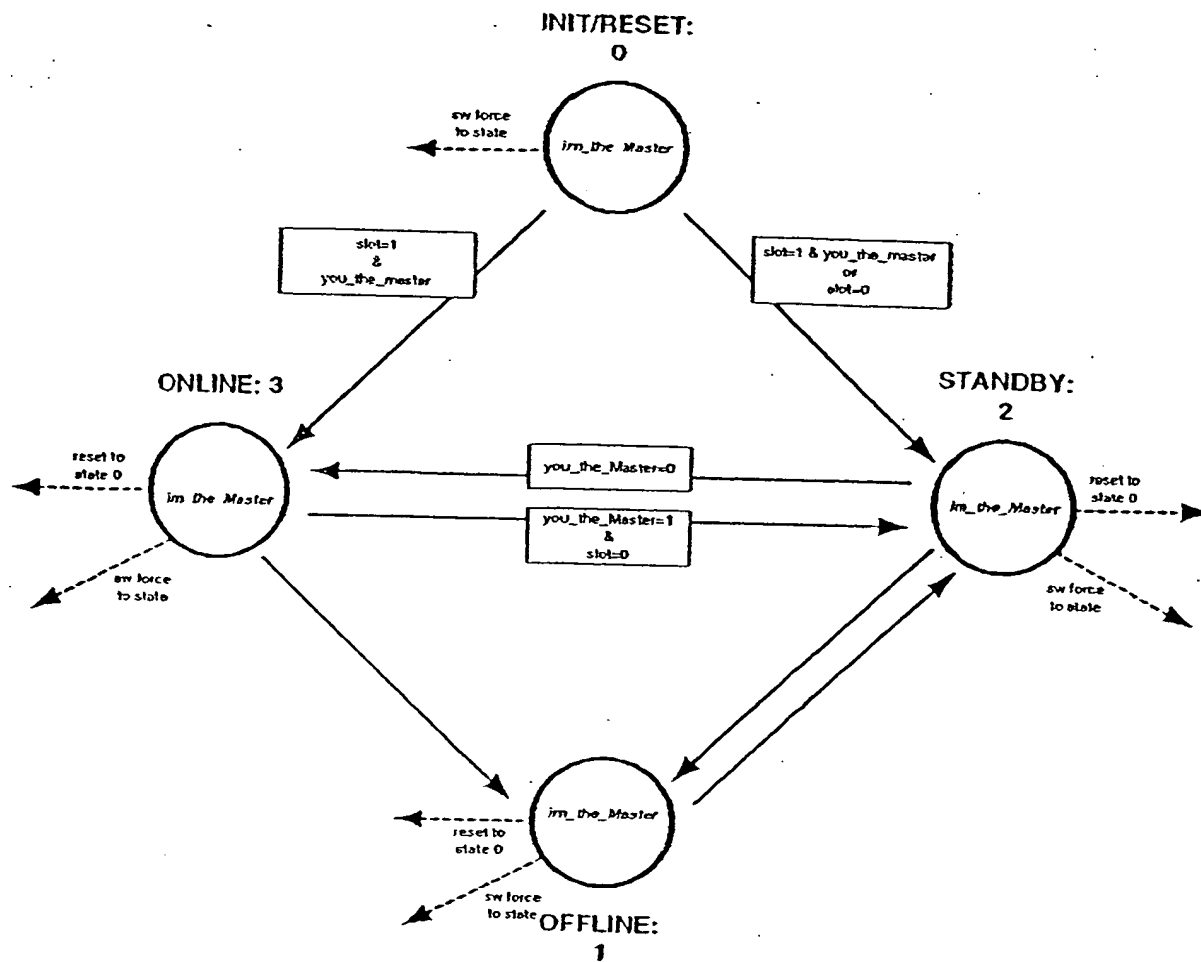


FIG. 46



LTS

665

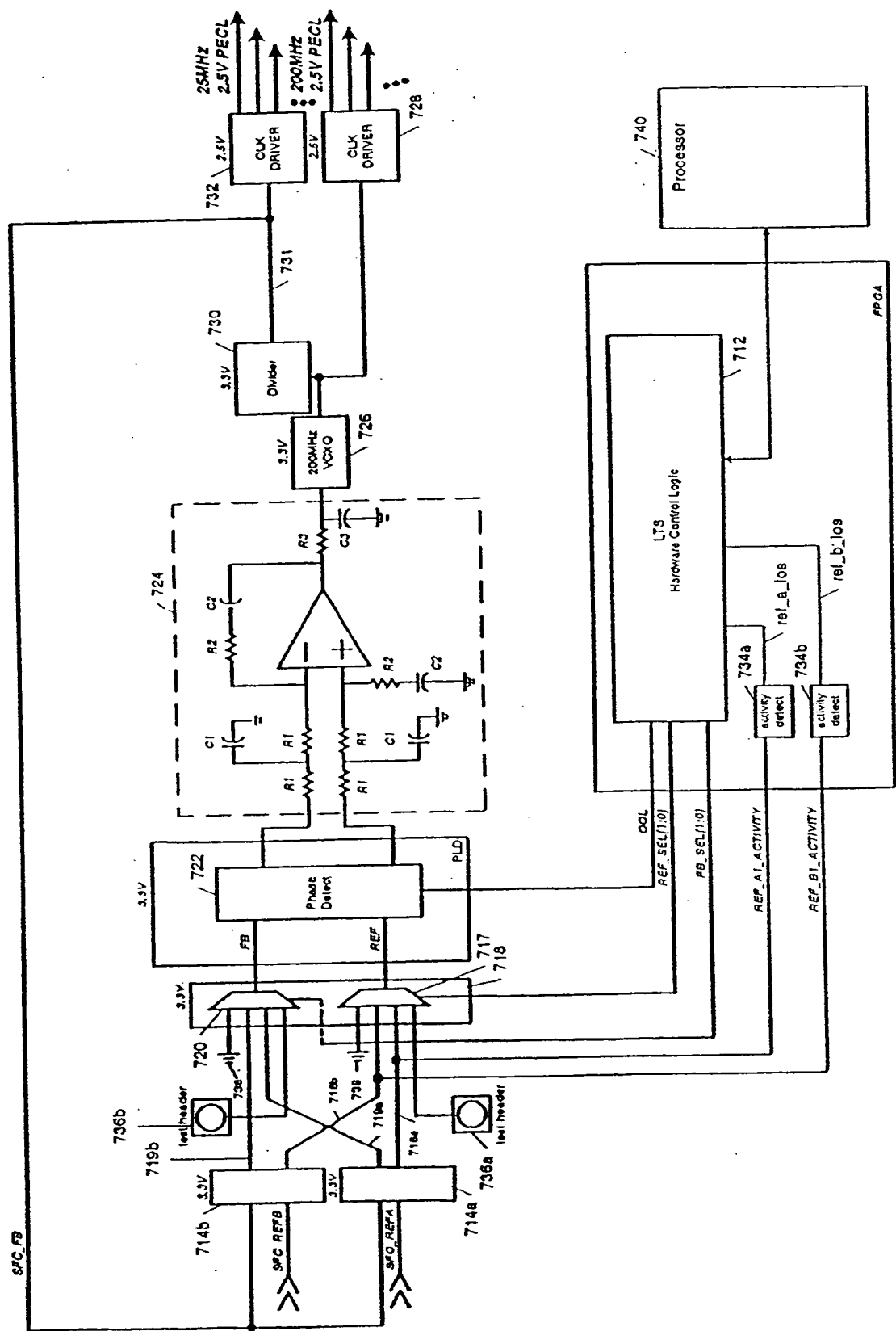


FIG. 47

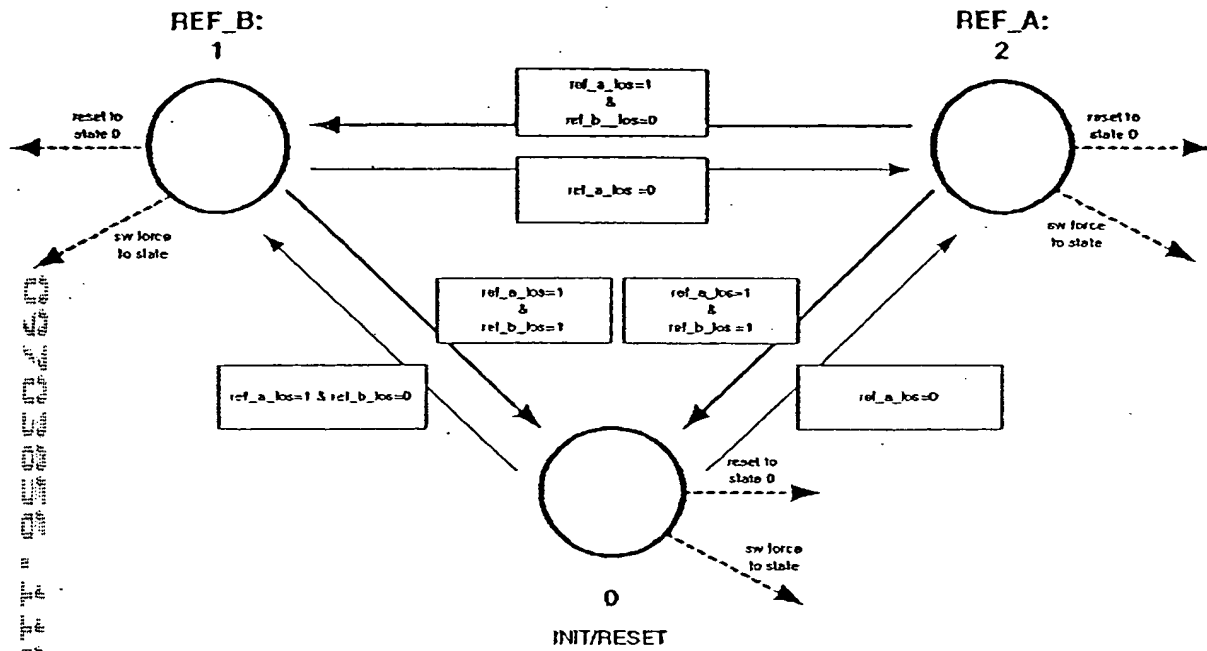
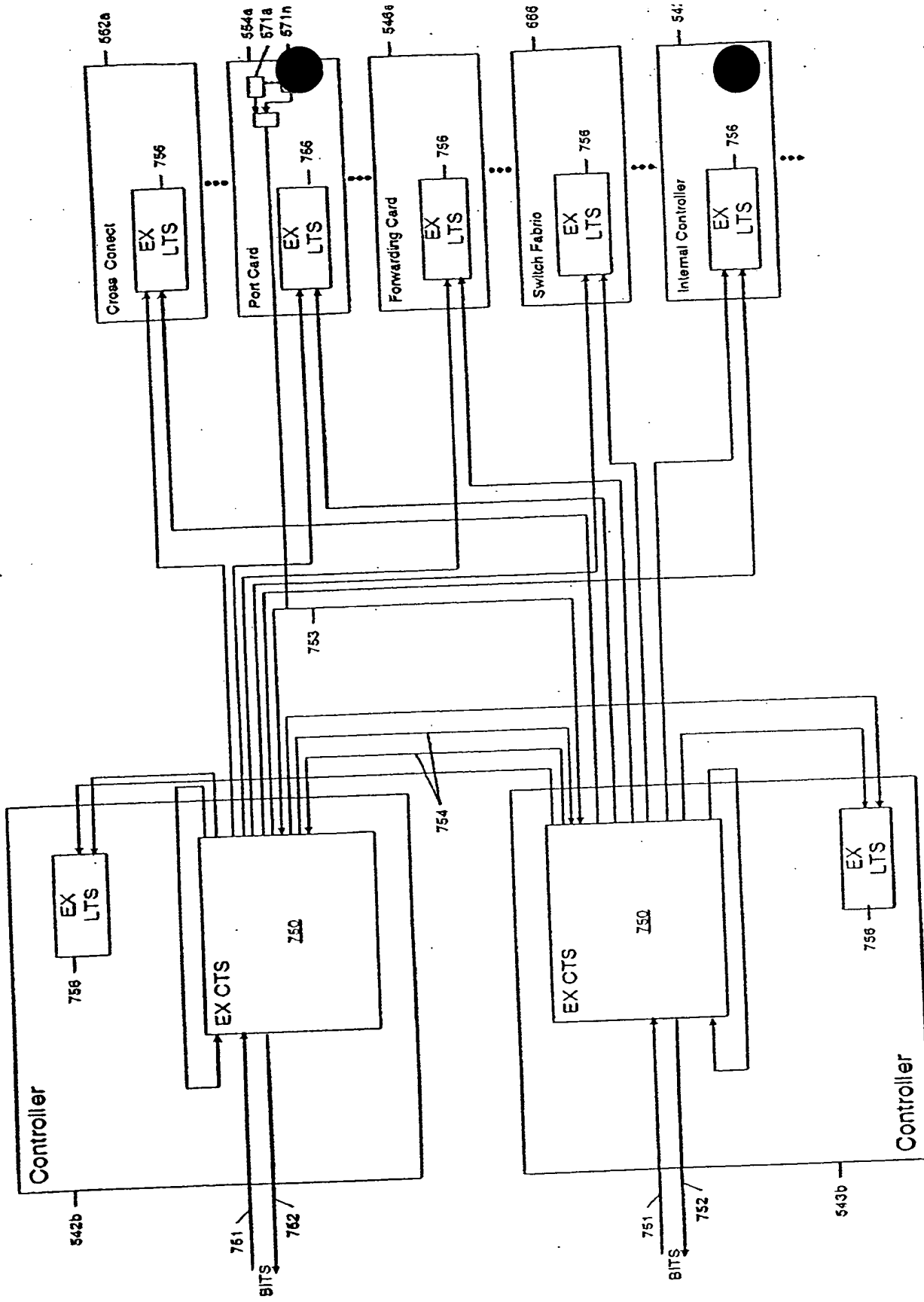


FIG. 48



EXACTS 750

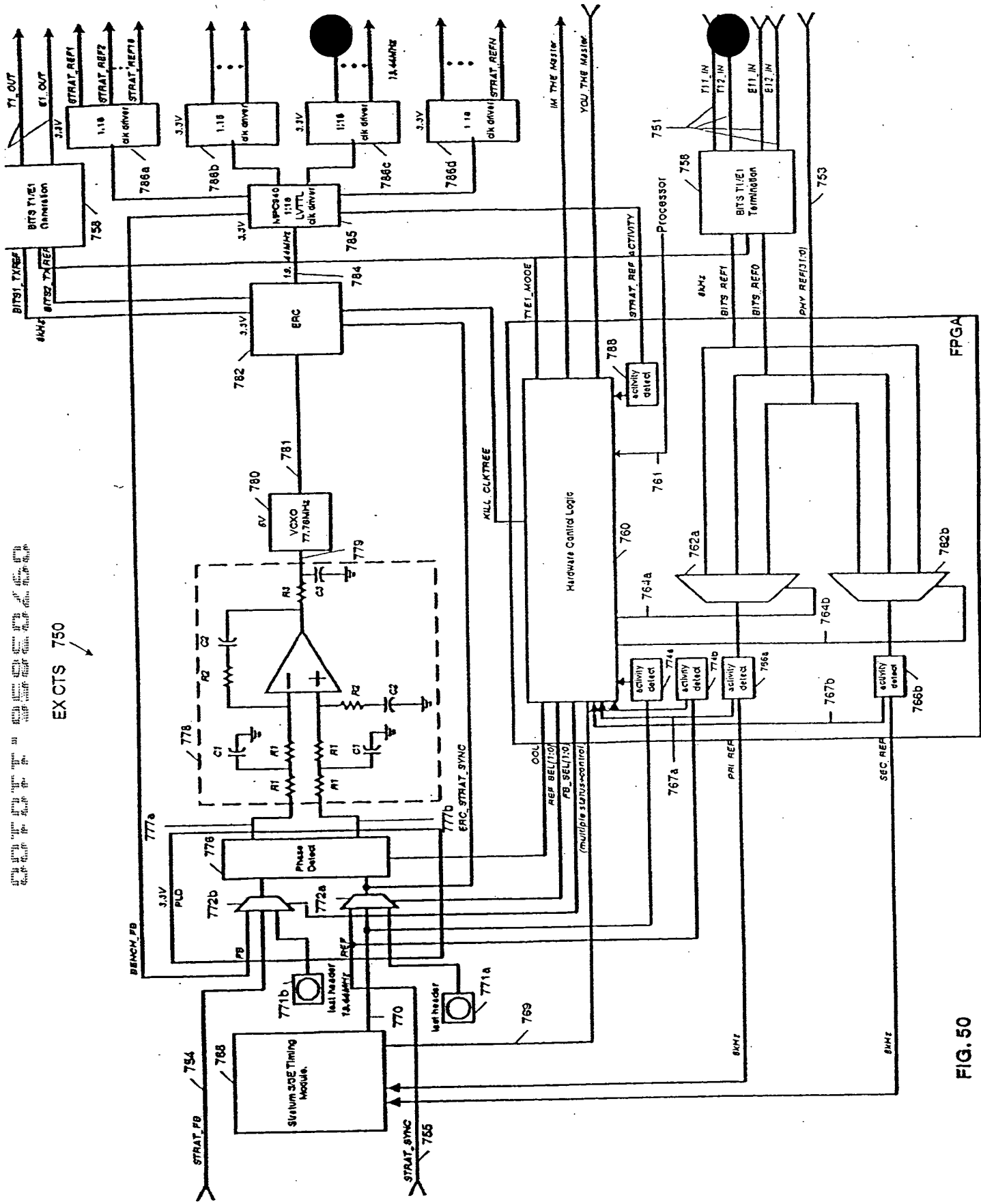


FIG. 50

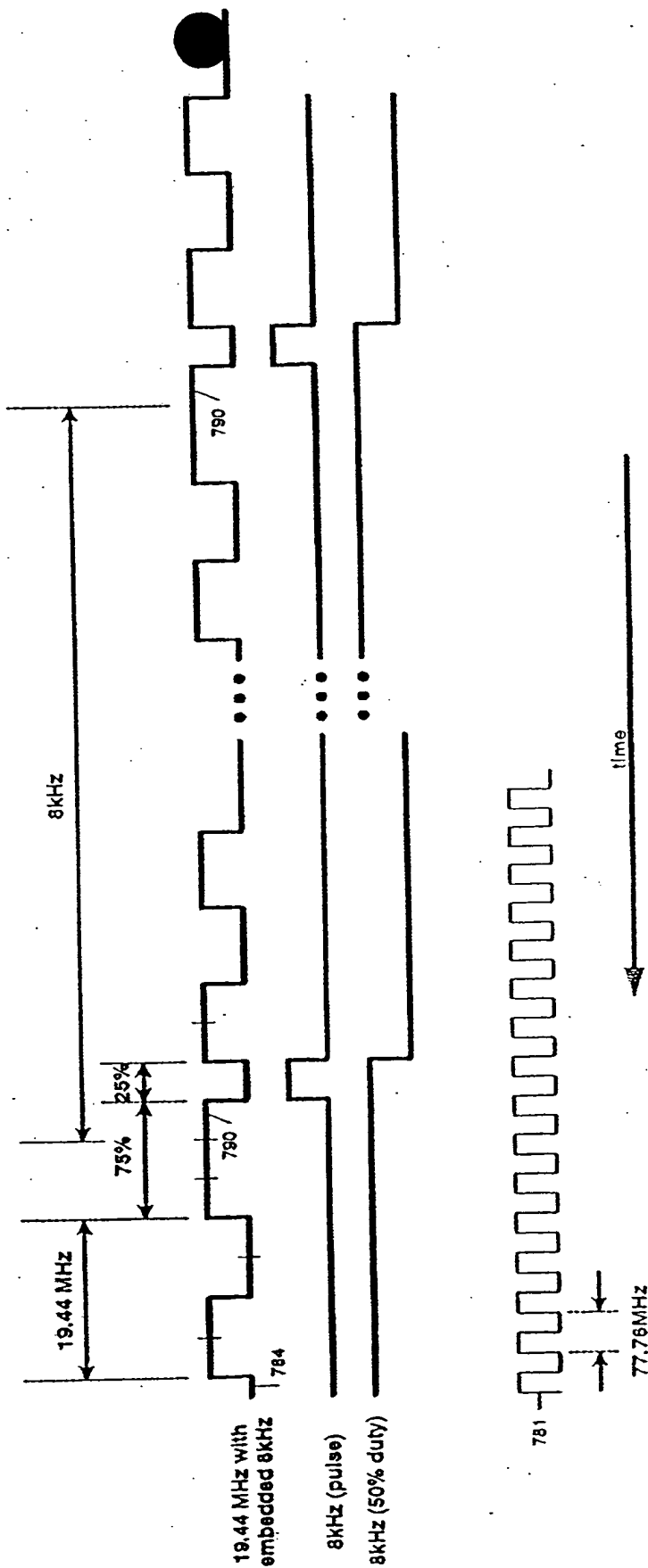


FIG. 51

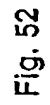
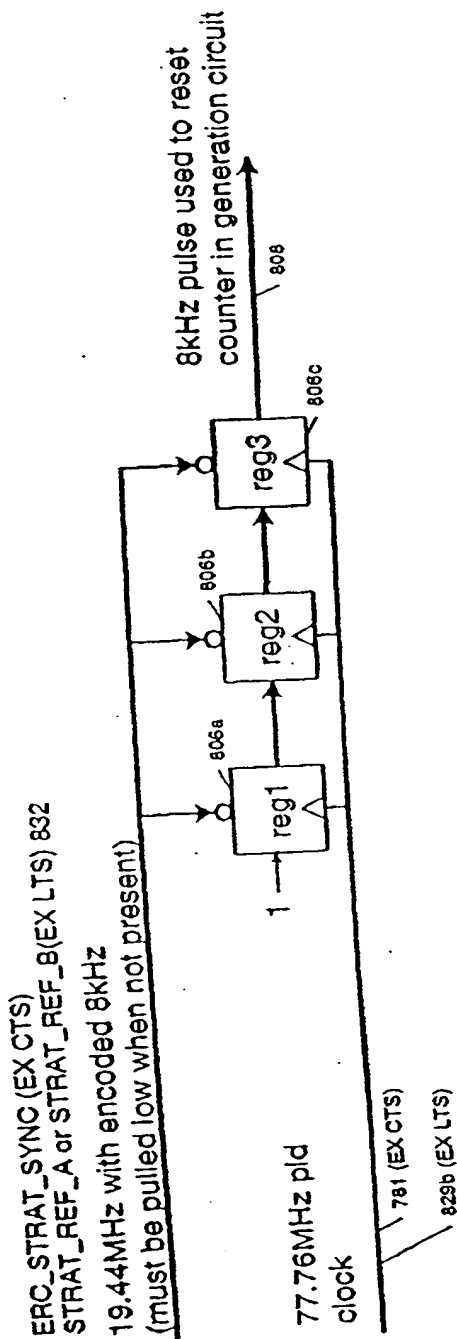


Fig. 52

ERC\_STRAT\_SYNC (EX CTS)  
STRAT\_REF\_A or STRAT\_REF\_B (EX LTS) 832  
19.44MHz with encoded 8kHz  
(must be pulled low when not present)

804



Extractor

FIG. 53

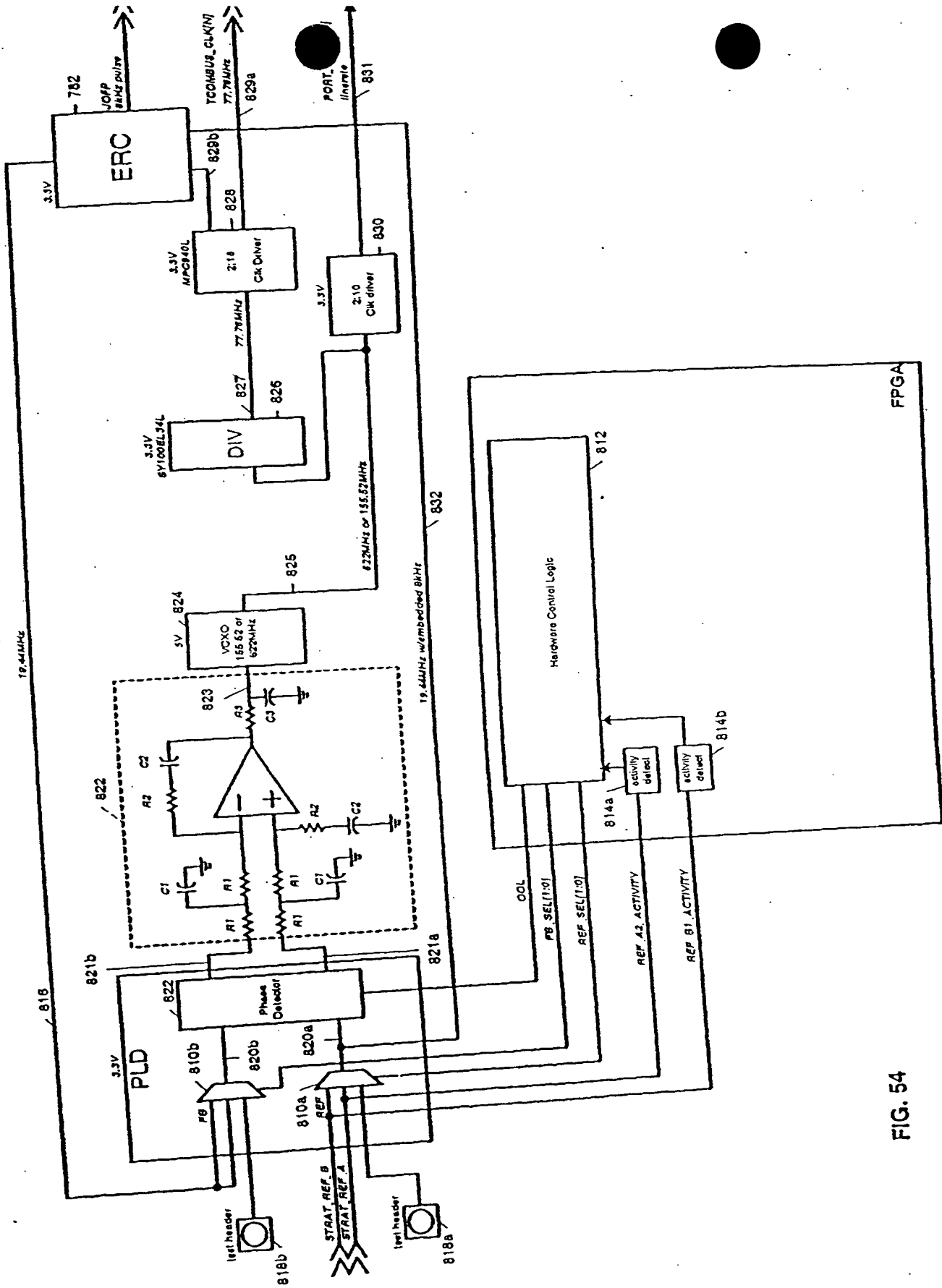
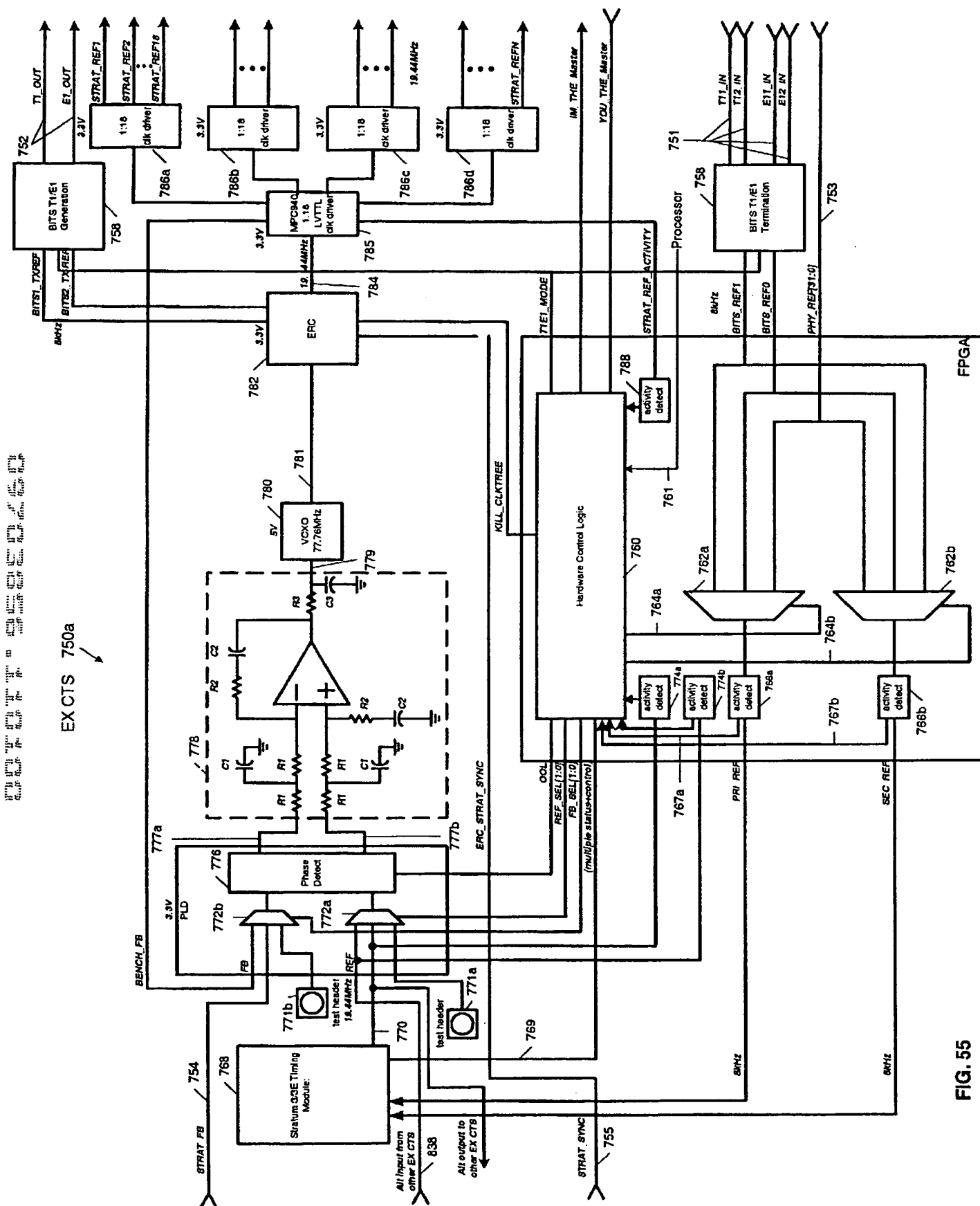


FIG. 54





**FIG. 55**

FIG. 56 is a block diagram of a system architecture for a network device, showing the interconnections between various components.

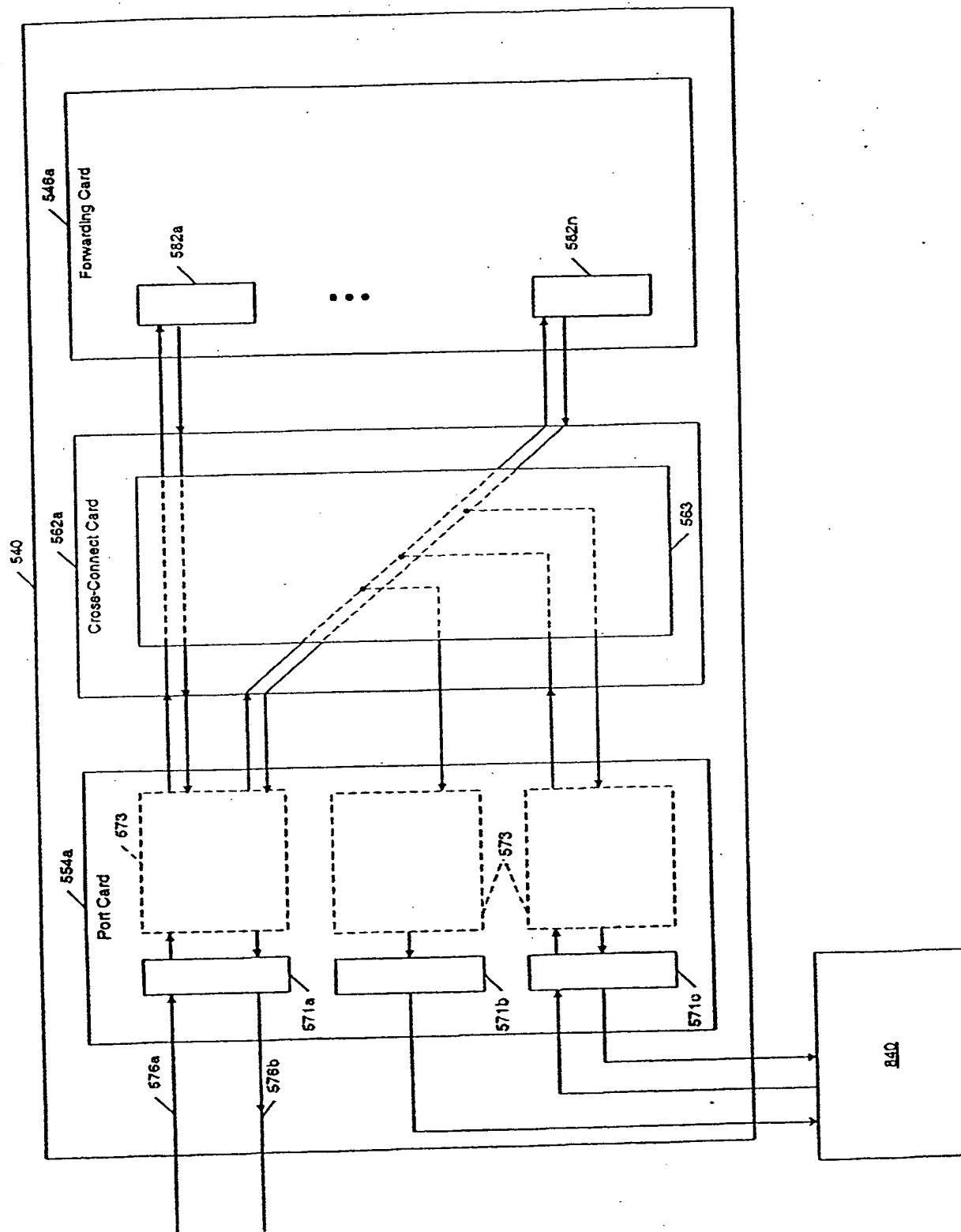


Fig. 56

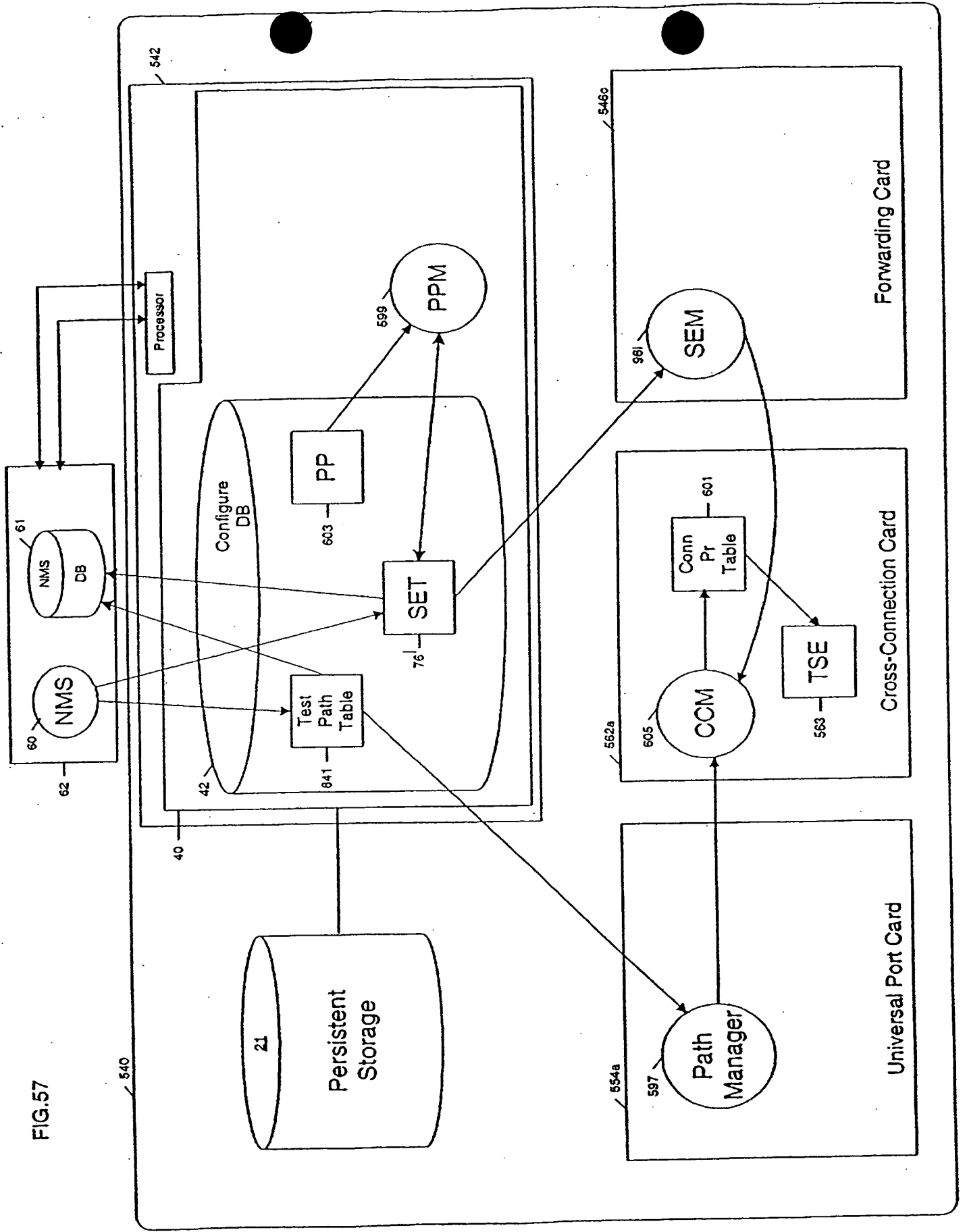


FIG. 58

Test Path Table 841

| 844      |             | 845       |                 |         |                      |
|----------|-------------|-----------|-----------------|---------|----------------------|
| Path LID | UP Port LID | Time Slot | # of Time Slots | Monitor | Enable Port Receiver |
| 1666     | 1232        | 4         | 3               | Ingress | No                   |
| 1666     | 1233        | 4         | 3               | Egress  | No                   |
| 1666     | 1233        | 4         | 3               | Ingress | Yes                  |
| ...      | ...         | ...       | ...             |         | ...                  |

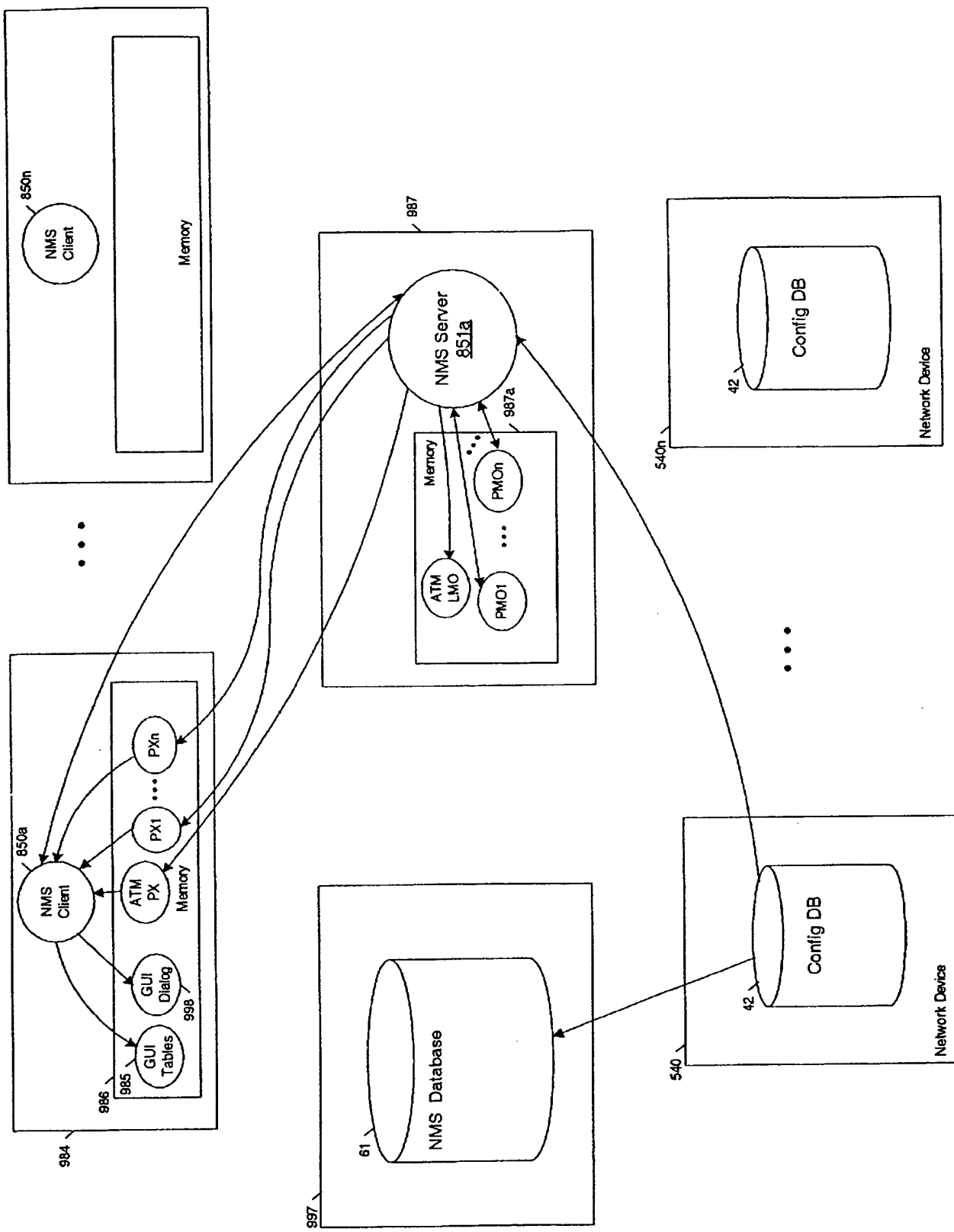


Fig. 59

Fig. 60a

## Managed Device Table

| PID | A1 | ... | An |
|-----|----|-----|----|
| 1   |    |     |    |

983b points to the first row. 983 points to the header row. 983a points to the first column.

Fig. 60b

## Chassis Table

| PID | A1 | ... | An | Managed Device PID |
|-----|----|-----|----|--------------------|
| 1   |    |     |    | 1                  |
| ⋮   | ⋮  | ⋮   | ⋮  | ⋮                  |

988b points to the first row. 988c points to the header row. 988 points to the last column. 988a points to the first row of the last column.

Fig. 60c

## Shelf Table

| PID | A1 | ... | An | Chassis PID |
|-----|----|-----|----|-------------|
| 3   |    |     |    | 2           |
| 4   |    |     |    | 2           |
| ⋮   | ⋮  | ⋮   | ⋮  | ⋮           |
| 18  |    |     |    | 2           |

989a points to the first row. 989 points to the header row. 989b points to the last column.

Fig. 60d

## Slot Table

| PID | A1 | ... | An | Shelf PID |
|-----|----|-----|----|-----------|
| 20  |    |     |    | 3         |
| 21  |    |     |    | 3         |
| ⋮   | ⋮  | ⋮   | ⋮  | ⋮         |
| 116 |    |     |    | 18        |

990a points to the first row. 990 points to the header row. 990b points to the last column. 990c points to the first row of the first column. 990d points to the last row of the first column.

# CARD TABLE

| 47a<br>PID | CWD TYPE | VERSION NO. | 47b<br>47'<br>SLOT<br>PID |     |
|------------|----------|-------------|---------------------------|-----|
|            |          |             | SLOT                      | PID |
| 120        | 0XF002   | 3           | 20                        |     |
| 121        | 0XF002   | 4           | 21                        |     |
| ⋮          | ⋮        | ⋮           | ⋮                         | ⋮   |
| 124        | 0X6002   | 1           | 24                        |     |
| ⋮          | ⋮        | ⋮           | ⋮                         | ⋮   |
| 131        | 0XF002   | 1           | 31                        |     |
| ⋮          | ⋮        | ⋮           | ⋮                         | ⋮   |

FIG. 60e

# PORT TABLE

| PID | PORT TYPE | VERSION NO. | CARD PID | ... |
|-----|-----------|-------------|----------|-----|
| 300 | 00620     | 1           | 20       |     |
| 301 | 00620     | 1           | 20       |     |
| 302 | 00620     | 1           | 20       |     |
| 303 | 00620     | 1           | 20       |     |
| 304 | 00820     | 1           | 20       |     |
| :   | :         | :           | :        | :   |
| 400 | 00620     | 1           | 39       |     |
| :   | :         | :           | :        | :   |

FIG. 60f



FIG. 60g

SONET Path Table 600

| 600a | 600b | Path<br>LID | Port<br>PID | Time Slot | # of<br>Time<br>Slots | ... |
|------|------|-------------|-------------|-----------|-----------------------|-----|
|      |      | 901         | 304         | 4         | 3                     |     |
|      |      | ...         | ...         | ...       | ...                   | ... |

FIG. 60h

Service EndPoint Table 76''

| 76a    | 76b | 76c    | 76d          | 76e          | 76b      |
|--------|-----|--------|--------------|--------------|----------|
| SE LID | Q # | FC PID | FC Slice PID | FC Time Slot | Path LID |
| 3000   |     |        |              |              | 901      |
| ...    | ... | ...    | ...          | ...          | ...      |

Fig. 60i

# ATM IF Table

|                       |                     |                |             |
|-----------------------|---------------------|----------------|-------------|
| 114a<br>ATM IF<br>LID | ATM<br>Group<br>LID | 114b<br>SE LID | 114"<br>... |
| 5054                  |                     | 3000           | ...         |
| ⋮                     | ⋮                   | ⋮              | ...         |

Fig. 60j

Virtual ATM IF Table

| 993a | LID  | A1 | ... | An | ATM IF LID | 993b |
|------|------|----|-----|----|------------|------|
|      | 7489 |    |     |    | 5054       | 993  |
|      | ⋮    | ⋮  | ⋮   | ⋮  | ⋮          |      |

Fig. 60k

Virtual Connection Table

| 994a | LID | A1 | ... | An | Vir. ATM IF LID | 994b |
|------|-----|----|-----|----|-----------------|------|
|      | ⋮   | ⋮  | ⋮   | ⋮  | ⋮               | 994  |
|      | ⋮   | ⋮  | ⋮   | ⋮  | ⋮               |      |

Fig. 60L

Virtual Link Table

| 995a | LID | A1 | ... | An | 995b           | 995c            | 995 |
|------|-----|----|-----|----|----------------|-----------------|-----|
|      | ⋮   | ⋮  | ⋮   | ⋮  | Vir. Conn. LID | Cross-Conn. LID |     |
|      | ⋮   | ⋮  | ⋮   | ⋮  | ⋮              | ⋮               |     |

Fig. 60m

Cross-Connect Table

| 996a | LID | A1 | ... | An | 966b           | 966c           | 996 |
|------|-----|----|-----|----|----------------|----------------|-----|
|      | ⋮   | ⋮  | ⋮   | ⋮  | Vir. Link1 LID | Vir. Link2 LID |     |
|      | ⋮   | ⋮  | ⋮   | ⋮  | ⋮              | ⋮              |     |

Fig. 60n

### ATM Node Table

999

999a

999b

| LID  | A1 | ... | An | Managed Device PID |
|------|----|-----|----|--------------------|
| 5000 |    |     |    | 1                  |

999c

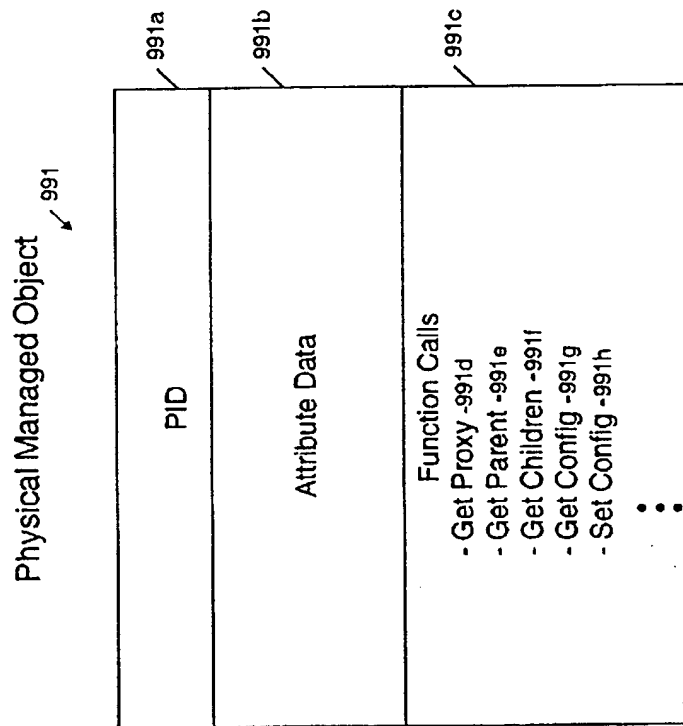
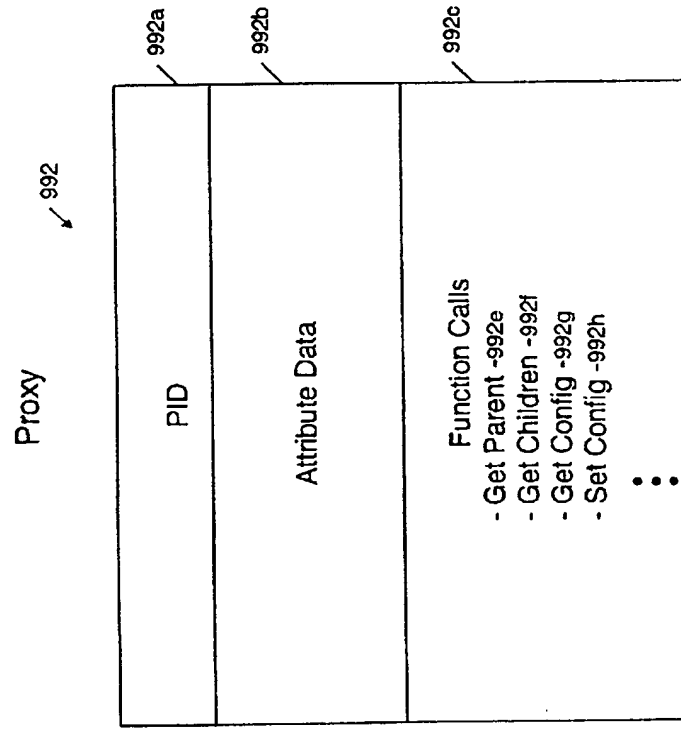


Fig. 61a

Fig. 61b



← 997

**EvailNet Manager: Modify SONET Path - Shell 11/Slot 4/Port 1**

Path1\_11/4/1

1

STB-3c

Terminated-ATM

998b

997a

Fig. 62



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☒ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☒ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**